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# Trading in Wool Top 

## Futures

Commodity Exchange Administration

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# UNITED STATES DEPARTMENT OF AGRICULTURE <br> WASHINGTON, D. C., AUGUST 1941 

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# Trading in Wool Top Futures ${ }^{1}$ <br> CONTENTS 

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## FOREWORD

Wool which has been scoured, carded, and combed in preparation for spinning into worsted yarn is known as wool tops. Trading in wool tops for future delivery was inaugurated by the Wool Associates of the New York Cotton Exchange in May 1931. By an act of Congress approved April 7, 1938, the provisions of the Commodity Exchange Act were made applicable to wool tops. This act, the basic part of which has been in force since 1922, provides Federal regulation and supervision of futures trading on commodity exchanges in certain specified commodities. ${ }^{2}$ It is administered by the Commodity Exchange Administration under the direction of the Secretary of Agriculture.

For some time prior to the adoption of the amendment adding wool tops to the Commodity Exchange Act, wool-grower interests and also certain trade interests had been critical of the wool top futures exchange. These interests expected that in addition to current supervision of trading, a broad and searching investigation of the whole market would be made. Conscious of this need, the Commodity Exchange Administration submitted its estimates of what the cost of such a survey would be. The amount appropriated, however, was only the amount estimated as necessary to carry on the ordinary routine activities incident to supervision.

[^0]Early in the administration of the Commodity Exchange Act with respect to wool top futures it became apparent that this market differed in many important respects from other commodity markets with which the Administration had experience. It was decided to start in a small way to assemble information and data relating to the operations of the wool top futures market as a basis for later study. This study is not complete and cannot be as comprehensive as would be desirable because of the situation described. Nevertheless, a large amount of interesting and significant information has been gathered. Because of the importance of the factual information obtained thus far it has been determined to issue a partial report at this time.

The present report is devoted to an examination of futures trading on the New York Wool Top Exchange, known officially as the Wool Associates of the New York Cotton Exchange, Inc. It is hoped to present later a study of the relation of operations in the futures market to the growing, marketing, and processing of wool. Much of the basic material for such a study has been collected.

When the present study was begun in June 1938 it was decided that it would be desirable to obtain a complete record of futures trading in wool tops from the time when it was still quite small down to as recent a date as possible. The period selected was the 22 months from September 1, 1936, to June 30, 1938. In this report this period is called the "survey period." It was necessary to compile a record of all wool top futures trades made during this period showing the size and price of each trade as well as the name and address of the customer, the futures commission merchant, and the exchange member who cleared the transaction. This information was subjected to various forms of analysis and summarization. Cross-section studies were made of the structure of the market at different points of time and special attention also was given to the factors involved in the growth of the market for wool top futures.

The Commodity Exchange Administration, as a first step in its supervision program, established a system similar to that in effect for other commodities by which current reports are received from traders holding or controlling positions in one wool top future of 125,000 pounds ( 25 contracts) or more. On the basis of these reports, a supplementary survey of futures trading was made for a period of 13 months extending from July 1, 1938, to July 31, 1939. This survey includes only traders who at one time or another had positions large enough to place them in reporting status, but their reports have been supplemented with information for days on which they were not in reporting status, so that a continuous record of their trading is now available. During this 13 -month period over 62 percent of all trading on the exchange was done by these reporting traders. This second period is referred to in the report as the "partial-survey period."

The main body of information in this report thus relates to a period of nearly 3 years from September 1, 1936, to July 31, 1939. In addition, because of the extraordinary growth in activity on the wool top futures market late in 1939, supplementary data for the last 5 months of 1939 taken from current reports to the Commodity Exchange Administration have been included.

The second study, which it is hoped will be made, will deal with the use of the futures market by wool growers, wool dealers, top makers, mills, and other interests connected directly with the growing,
marketing, and manufacture of wool. Both spot wool operations and futures trading have been examined in the books of the firms included in the study. This phase of the work is a time-consuming task and calls for a high degree of cooperation from interested parties. To a marked extent such cooperation has been forthcoming. But further information is needed to give a sound basis for interpreting the data already accumulated. Publication at this time of the information assembled for the present study will, it is hoped, lead to further cooperation by persons in a position to supply pertinent information and aid in interpreting the data obtained. If this result is achieved a considerable contribution can be made to knowledge of futures trading in wool tops and also to a better understanding of the role of futures trading in marketing agricultural commodities. J. M. Mehl, Chief.

## WOOL AND WOOL TOP EXCHANGES ${ }^{3}$

As early as June 1890 a special committee was appointed by the New York Cotton Exchange to inquire into the desirability of instituting futures trading in wool. Apparentiy the committee tested the views of many wool dealers, manufacturers, and growers, by means of hearings and correspondence, and came to the conclusion that the difficulty of establishing standard wool grades for futures trading and deliveries was too great to make the proposal feasible. ${ }^{4}$

In March 1927, nearly 40 years later, a group of members of the New York Cotton Exchange petitioned the Board of Managers to investigate the feasibility of trading in wool futures on that exchange. A special committee was selected to explore the matter and questionnaires were sent to members of the wool trade and of other branches of the industry asking whether they would support a futures market for trading in grease wool, scoured wool, or wool tops. ${ }^{5}$ It developed that there was considerable opposition and it was not until 4 years later, in April 1931, that the Wool Associates of the New York Cotton Exchange, Inc. was organized. Trading began on May 18, 1931.

At the time the New York exchange was opened trading in woo top futures was being carried on in both Antwerp and RoubaixTourcoing. The exchange at Antwerp, Belgium, known officially as the Marché d'Anvers pour l'Achat et la Vente à Terme de Laines Peignées, was established in 1887. This market continued to operate until it was forced to close by the German invasion in 1914. Reopening on July 1, 1929, it remained in continuous operation until September 4, 1939, when it was again closed by the renewal of European hostilities. The Antwerp exchange at the outset sponsored futures trading in South American raw wools as well as in tops from similar wools, but the trading in raw wools was abandoned at a comparatively early date, and trading thereafter was restricted to wool tops.

A comparison of the volume of trading in wool top futures and grease wool futures at Antwerp for a period of 6 years is shown in

[^1]table $1 .{ }^{6}$ The trading in grease wool futures was initially fairly heary as compared with early trading in wool top futures on the New York Wool Top Exchange in 1932 and 1933 when the totals were 5,450,000 and $7,360,000$ pounds respectively. Trading in grease wool was very much smaller than trading in wool tops at Antwerp, however, and declined rapidly from 1896 on.

Table 1.-Comparison of the volume of trading in wool top and in grease wool futures at Antwerp, 1895-1900

| Year | Wool top futures | Grease wool futures |  | Year | Wool top futures | Grease wool futures |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1,000 lb. | Bales | Equivalent in 1,000 lb. |  |  | Bales | Equiralent <br> in 1,000 lb |
| 1895 | 121,616 | 16, 225 | 14,600. | 1898 | 1,80,930 | 3, 150 | 2, 850 |
| 1896 | 102, 642 | 14,675 | 13, 200 | 1899 | 125, 859 | 1,275 | 1,150 |
| 1897 | 79,997 | 8,925 | 8,400 | 1900 | 214, 052 | 1,550 | 1,400 |

Two different contracts were traded in on the Antwerp exchange, one in British pence per pound, calling for 5,000 pounds of tops; the other in Belgian francs, calling for 2,250 kilograms of tops, equiralent to 4,960 pounds. In other respects the two contracts were alike. The standard grade was known as "type d'Anvers," a drycombed Australian top with a permissible moisture regain of $18 \frac{1}{4}$ percent. This moisture allowance may be compared with the 15 percent moisture and 3 percent oil content allowable for standard tops on the New York Wool Top Exchange. The tops traded on these two markets were considered to be of approximately equal value.

Contrary to the usual practice on futures markets, trading on the Antwerp exchange was not carried on by outcry on an exchange trading floor. The market was conducted by 5 brokers and 14 futures commission merchants who carried on business with each other, largely by telephone.

The exchange at Roubaix-Tourcoing was opened on October 1, 1888, and continued in operation until the beginning of the World War in 1914. This exchange (officially designated as the Marché de Roubaix-Tourcoing pour l'Achat et la Vente à Terme de Laines Peignées) was located in the two adjoining towns of Roubaix and Tourcoing in the important wool-manufacturing center of northern France near the Belgian border. Morning sessions were held in Roubaix and the afternoon sessions in Tourcoing. The RoubaixTourcoing exchange was established for trading in "either wool or tops in principle, but almost wholly for tops." ${ }^{7}$ The standard grade was a dry-combed Australian top of a quality rather closely comparable with the New York exchange standard. Deliverable tops might also be made from wools grown in South Africa, Argentina, Uruguay, France, or Spain. The exchange was not reopened after the World War until June 1, 1922, and the volume of trading was small until about May 1930. Trading was continued until September 4, 1939, when the outbreak of war forced it to close.

Two markets no longer in existence dealing in wool or wool top futures were established in the late nineteenth century at Le Harre,

[^2]France, and Leipzig, Germany. The earliest futures market for any wool product apparently was at Le Havre, a leading port of entry for South American wools. Its futures contract called for the delivery of South American grease wools and permitted delivery of wool from the Argentine, Uruguay, and Brazil. This market was closed at the outbreak of the World War and never reopened. The volume of trading has not been published but it is claimed that it reached "considerable proportions." 8 One estimate puts the annual volume at between 3 and 4 hundred thousand bales or the equivalent of approximately 270 to 360 million pounds of wool. ${ }^{9}$ If accurate this would compare favorably with the volume of trading in wool top futures on any market in recent years.

The Leipzig exchange was established in January 1890 for futures trading in wool tops but it never attained a position of any importance. Following the restrictions imposed by the German Exchange Act of 1896, the market gradually declined in importance. The volume of trading, usually quoted in kilograms, when converted to pounds was only $22,000,000$ pounds in 1900 , compared with $214,000,000$ pounds at Antwerp and $174,000,000$ pounds for the Roubaix-Tourcoing exchange, ${ }^{10}$

## FUTURES TRADING ON THE NEW YORK WOOL TOP EXCHANGE

Since the New York Wool Top Exchange was founded under the sponsorship of the New York Cotton Exchange, and not as an independent market, it has certain unusual features. There are two kinds of membership known respectively as class $A$ and class $B$. The members of the cotton exchange are automatically the class A members of the wool top exchange. They have all the advantages of membership. This includes reduced trading commission rates, which are one-half the commission rates charged to nonmembers. With the exception of aliens, the class $A$ members also have the privilege of trading on the floor of the exchange and of becoming members of the clearing association, and thus of clearing trades through the association. The cotton exchange membership is limited to 450 . The number of outstanding memberships during recent years has changed but slightly and has averaged approximately 425.

The class B members of the New York Wool Top Exchange are not members of the New York Cotton Exchange. They have fewer privileges than the class A members. While they have the benefit of reduced commission rates on wool top futures, they do not have floor trading privileges, nor may they become members of the clearing. association. The authorized number of class B memberships is limited to 150 . During the first 3 years of operation there were only 8 class B memberships outstanding, consisting of 1 dealer, 1 top maker, 1 manufacturer, 1 domestic commission house, and 4 foreign commission houses. In 1934 the number of foreign members was reduced to 3 , and the total number of class $B$ members to 7 .

On the dates of the annual directories thereafter the class B memberships are shown in table 2. The most rapid increase in class B

[^3]memberships took place in 1937 after the date of the directory, the number of members being more than doubled by accessions during the last 3 months of that year. November, with 28 new memberships, was the outstanding month.

Table 2.-Composition of the class B membership of the New York Wool Top Exchange, 1936-39

| Year | Dealers | Top makers | $\begin{aligned} & \text { Manu- } \\ & \text { facturers } \end{aligned}$ | Commission houses |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Domestic | Foreign |  |
| 1935-.. | $\begin{array}{r} 5 \\ 7 \\ 11 \\ 30 \\ 32 \end{array}$ | 12 |  |  |  |  |
| 1937 |  |  | 3 | 2 | 2 | 22 |
| 1939 |  |  | 15 | 4 |  | $\stackrel{65}{65}$ |

Futures trading on the New York Wool Top Exchange may be conducted in contracts for delivery during the current month and any of the succeeding 11 months. While the price is on a per pound basis, the unit of trading is a contract for 5,000 pounds of wool tops, net conditioned weight. The net conditioned weight is the actual net weight adjusted to the equivalent of 3 percent of oil and natural fat, and 15 percent of moisture. In making delivery, the weight may vary as much as 4 percent from the specified quantity.

The quality of wool tops to which futures trading relates is known as the wool top exchange standard. This is defined in section 77 of the rules and bylaws of the exchange as, "An American Fine Wool Top conforming to grade 64s, official United States Standards for wool top, made out of merino wools, oil combed, and containing a normal percentage of $3 \%$ of oil, including natural fat, produced from wool grown in and shorn from living animals in the United States, cleaned, scoured, carded, and combed in accordance with the methods and usages prevailing in the industry, and of average length and color."

Tops conforming to the above description are deliverable on futures contracts at the contract price. Tops of better quality may be delivered at a premium and tops of poorer quality at a discount, but the maximum allowable premium is 3 percent, and tops rated as more than 8 percent inferior in value to the exchange standard are not deliverable. The lowest deliverable grade must be at least as fine as 58 s , i. e., halfblood. Tenderable tops under the rules of the exchange may not contain: (1) More than 20 percent of pulled wool, clean content; (2) "more than $5 \%$ of scouled wools resulting from a previous mill scouring"' (3) more than $1 \frac{1}{2}$ percent of reworked wool originating from "the strictly combing operation"; (4) any carbonized or contaminated wools or mineral oil; or (5) more than 4 percent of oil, including natural fat. ${ }^{11}$ Dry-combed tops conforming to the above requirements are tenderable at the specified premiums for oil and moisture content. Oil-combed tops combed on Schlumberger or French combs are not tenderable. Wool tops which have been manufactured for a period longer than 12 months are subject to a discount of $2 \frac{1}{2}$ percent of the net inroice price, and an additional $2 \frac{1}{2}$ percent discount

[^4]at the end of each further period of 12 months. Tops made from certain foreign wools are deliverable if they conform to the above quality specifications.

Wool tops to be delivered must have been inspected and valued with reference to the exchange standard under the auspices of the exchange. When such inspection has been made the exchange issues certificates, and the tops are referred to as certificated tops. Deliveries of wool tops are made only from warehouses in Boston, Mass. The quantity of certificated wool tops in the approved public warehouses on the first day of each month has been published currently by the exchange. In table 3 are shown the amounts of such stocks for each month from October 1931 to December 1939. ${ }^{12}$

Table 3.-Stocks of certificated wool tops in approved public warehouses, by months, from October 1931 to December $1939{ }^{1}$
[In thousands of pounds]

| Year | Jan. 1 | Feb. 1 | Mar. 1 | Apr. 1 | May 1 | June 1 | July 1 | Aug. 1 | Sept. 1 | Oct. 1 | Nov. 1 | Dec. 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1931 |  |  |  |  |  |  |  |  |  | 70 | 70 | 75 |
| 1932 | 60 | 65 | 60 | 90 | 85 | 95 | 100 | 110 | 135 | 105 | 100 | 60 |
| 1933 | 75 | 70 | 150 | 145 | 195 | 135 | 50 | 50 | 50 | 60 | 145 | 210 |
| 1934 | 350 | 420 | 560 | 625 | 585 | 530 | 530 | 475 | 435 | 350 | 285 | 205 |
| 1935 | 115 | 35 | 10 | 25 |  | 60 | 25 | 35 | 180 | 220 | 220 | 400 |
| 1936 | 490 | 315 | 265 | 275 | 285 | 360 | 430 | 405 | 420 | 340 | 180 | 130 |
| 1937 | 190 | 115 | 85 | 140 | 300 | 460 | 540 | 530 | 480 | 835 | 925 | 880 |
| 1938 | 775 | 815 | 1,080 | 860 | 1,075 | 1,045 | 1,270 | 1,175 | 1,255 | 1,600 | 1,460 | 1,195 |
| 1939 | 1,045 | 600 | 285 | 70 | 90 | 410 | 295 | 280 | 175 | 90 | 120 | 115 |

${ }^{1}$ Source: Weekly Wool Trade Report, New York Wool Top Exchange Service.
Notice of intent to deliver may be issued, at the seller's option, at any time during the period beginning 5 trading days prior to the first of the month of matarity, and extending to within 5 trading days of the end of that month. The receiver of a notice of delivery, i. e., a long, may "stop" the notice, in which event he will receive delivery of the wool tops 5 days later. If, however, he does not wish to take delivery he may sell the future in the market, subject to certain time limitations, and "pass" the notice on to the trader who buys the future. This trader in turn may stop or pass the notice, or if he is a short, buying to cover his short position, he may return the notice to the clearing house from which it will be reissued.

The volume of deliveries, figured on the basis of 5,000 pounds per notice, is shown in table 4 by months for the period ending with December 1939.

The rules of the exchange provide that during any one day trades for any future shall not be made beyond a range of 10 cents per pound; aiso that the prices for any future during any one day shall not vary more than 10 cents per pound above or below the closing range for that future on the preceding business session of the exchange. This rule does not apply to trading in a future on and after the fifteenth day of the delivery month. This rule may be changed or suspended by the Board of Governors without previous notice.

The rules also provide that no trader, including his affiliates, shall have an interest in any future in excess of the limits prescribed by the Board of Governors, though this limit does not apply to hedges

[^5]against purchases and sales of spot wool and wool tops. In the spring of 1938 the board established a limit of 500 contracts $(2,500,000$ pounds) on long and short positions. The board may also prescribe a limit for hedging transactions of any trader, if these trades "are of such volume as to unduly affect or endanger the normal parities between months or markets, or for any other valid reason." The board, also, may at any time prescribe the maximum commitments that may be held by any trader in any one month.

Table 4.-Volume of deliveries on New York Wool Top Exchange, by futures, May 1931 to December 19391
[In thousands of pounds]

| Year | Future |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Total |
| 1931 |  |  |  |  |  |  |  |  | 40 |  | 15 |  | 80 |
| 1932 | 35 | 5 | 155 | 10 | 105 |  | ${ }_{45}^{20}$ | 40 | ${ }_{35}^{25}$ | 35 60 | 10 | 30 160 | ${ }_{665}^{225}$ |
| 1934 | 80 | 135 | 130 | 105 | 75 | 5 | 40 | 15 | 190 | 15 | 15 | 55 | 860 |
| 1935 | 15 | 5 | 25 |  | 40 | 10 | 10 | 45 | 65 | 75 | 40 | 390 | ${ }^{720}$ |
| 1936 | 40 |  | 130 |  | 105 | 10 | 80 | 40 | 15 | 90 | 45 | 110 | ${ }_{2} 675$ |
| 1937 | 180 | ${ }_{20}^{10}$ | 750 | 35 10 | 545 |  | 300 |  | 55 | 685 | 15 | 345 | ${ }_{2}^{2,820}$ |
| 1939-- | 5 |  | 105 |  | 260 |  | 55 |  |  | 130 |  | 285 | 2,820 |

${ }^{1}$ Source: Clearing Association, Inc., of New York Cotton Exchange, May 1931 to July 1938, inclusive; Commodity Exchange Administration, beginning Aug. 1, 1938.
${ }_{2}$ Trading began May 18, 1931.

## MARGIN REQUIREMENTS

All contract markets include in their bylaws or rules and regulations provisions relating to margins. The margins with which we are concerned here are of two types, those required of clearing members by the clearing house, and those required of customers by futures commission merchants.

On the New York Wool Top Exchange a clearing member must deposit with a designated depository a margin of $\$ 500$ per contract of 5,000 pounds on his net position and $\$ 200$ per contract on his straddle position. For instance, a clearing member might sell 10 March contracts and buy 6 July, leaving him with a straddle position of 6 contracts short March-long July and a net position of 4 contracts short. The margin requirement on these positions would amount to $\$ 1,200$ on the straddle position and $\$ 2,000$ on the net short position. This is the initial margin. At the close of each day thereafter he would be required to adjust his position to the daily settlement price. Thus if an increase of 1 cent a pound had occurred in all futures and his position had not changed no alteration in margin on his straddle position would result, but because of the change in the market value of his net short position it would be necessary to deposit $\$ 200$ with the clearing house to bring this net position to the market.

In the case of customer margins the initial deposit creates a credit balance which may be affected by adverse price movements, but is not ordinarily allowed to decline below a predetermined point. For wool tops, the bylaws of the exchange prohibit the extension of credit to a customer in connection with trades in wool top futures. In other words, a deficit in the account is not permitted.

The rules of most contract markets provide that members must require margins from their customers. A study of margin requirements of eight contract markets revealed only two without this provision. These two were the New York Wool Top Exchange and the Chicago Open Board of Trade. The other six markets were the Chicago Board of Trade, the New York Cotton Exchange, the New Orleans Cotton Exchange, the Minneapolis Chamber of Commerce, the Kansas City Board of Trade, and the Chicago Mercantile Exchange. The nature of the provisions of these eight exchanges with regard to customer margins is set forth in table 5. It may be seen that six of the eight require margins of speculative customers. Four exchanges require margins of all hedging and straddling customers, with one minor exception, while two permit only limited credit extension. The four exchanges mentioned, the three more important grain exchanges and the Chicago Mercantile Exchange, require that correspondent brokers (member or nonmember) deposit margins with the houses through which they deal. On the other hand, the grain exchanges do not require margins of floor traders, but the two larger cotton exchanges and the Chicago Mercantile Exchange do. The Chicago Mercantile Exchange is the only one which makes mandatory margins from all classes of customers enumerated.

Table 5.-Extent of compulsory margin requirements by surveyed contract markets for different types of customers of commission houses, as of June 30, 1939

| Market | Are compulsory margins required of- |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Nonmembers |  | Members ${ }^{1}$ |  |
|  | $\begin{aligned} & \text { Specula- } \\ & \text { tors } \end{aligned}$ | Hedgers and straddlers ${ }^{2}$ | Correspondents (for customers' accounts) | Floor traders |
| Grain exchanges: |  |  |  |  |
| Minneapolis Chamber of Commerce | Yes |  |  | No ${ }^{4}$ |
| Kansas City Board of Trade.--.---- | Yes | Yes | Yes | No ${ }^{5}$ |
| Cotton and wool top exchanges: |  |  |  | No |
| New York Cotton Exchange .- | Yes | No ${ }^{6}$ | No ${ }^{7}$ | Yes |
| New York Wool Top Exchange |  | No | No | No |
| New Orleans Cotton Exchange. | Yes |  | Nos ${ }^{7}$ | Yes |

[^6]Because of the close connection between the New York Cotton Exchange and the New York Wool Top Exchange the contrast between their requirements as to customer margins is interesting. The cotton exchange requires margins from speculative customers and floor traders, but allows credit extension to hedgers. The wool top exchange, on the other hand, has no compulsory margin provisions, but does not permit the extension of credit.

In the analysis of margins a study was made of the practices of commission houses as well as of the rules of the exchanges. In the case of wool tops, consideration was given to five of the most important futures commission merchants. Considerable diversity of practice was discovered. Only one of the five merchants required margins of all customers and these margins were frequently below the margins required by the clearing house. Two of the remaining four houses required margins of all speculators, but aside from this there was no class of trader from whom any of these houses consistently required margins. Some evidence was found that low margin requirements were used as a competitire derice among futures commission merchants. Where margins were required, they were usually less than the clearing house margin. This is in contrast to the situation in a number of exchanges where compulsory requirements of customers are usually some multiple of the clearing house requirement. The Chicago Board of Trade, for example, provides that customer margins shall be determined by the Board of Directors but shall not be less than 150 percent of clearing house margins. In practice, they have been twice the clearing house margin for some time.

No contract market has rules covering the conduct of members with respect to margins on customers' accounts in foreign markets. Because of this it is interesting to obserre that although the futures commission houses investigated had almost half as many accounts in foreign markets as in New York, none of them consistently required margins on customers' positions in European markets. Credit was also frequently extended on these foreign accounts. The extent of trading in foreign wool top markets is discussed in more detail in a later section.

## PRICE RELATIONSHIPS: WOOL TOP FUTURES, SPOT TOPS, AND RAW WOOL

As a background for an analysis of the growth of the New York wool top futures market and of futures trading from September 1936 to the end of 1939, some consideration should be given to price morements for wool top futures and the relations between these futures prices and spot prices for wool and wool tops. There were a number of important movements in these three price series between May 18, 1931, when trading in wool top futures began and the end of December 1939. Monthly arerage prices of the dominant future raried from a minimum of 48.5 cents a pound in July 1932 to a maximum of 115.2 cents in January 1937. Raw wool prices on a clean basis ranged from 36.5 cents per pound in July 1932 to 114.0 cents in January and February 1937, while spot top prices showed roughly the same rariation. There were also significant changes in the relations between futures prices and the prices of spot wool and spot tops.

Prices of spot wool and of tops manufactured from the wool differ largely because of the costs of converting wool into tops. These costs consist in considerable part of the charge for combing. In addition there is a loss on the resale of noils, or short fibers, used principally in the woolen branch of the industry. This loss is likely to increase as wool prices rise, as there is a tendency for noil prices to advance to a smaller extent than prices of raw wool or tops. On occasion the tops may hare a value which reflects their immediate
availability, as compared with a considerable delay which might be encountered in converting wool into tops.

This time element is relatively more important in the differences between the prices of top futures and spot tops. This is particularly true when the futures price is that of a month in the next clip year and when it is anticipated that supply conditions will be substantially different. Other factors also enter into this comparison, however. They include the price evaluation of the difference between a definite quality of spot tops, and the evaluation of the quality expected on delivery. Differences in location are also of some importance. Finally the future is depressed relatively to spots because of the greater uncertainty with respect to quality and time of delivery.

The difference in price between spot wool, clean basis, ${ }^{13}$ and wool top futures is a combination of the difference between spot wool and spot tops and the difference between spot tops and futures. For example, during October 1938 Territory fine staple wool averaged 71 cents per pound, and average fine domestic tops averaged 86.5 cents. The difference, therefore, was 15.5 cents. The March future sold for an arerage price of 83.9 cents, or 2.6 cents under spot tops. The spread between spot wool and futures was, therefore, 12.9 cents. This spread, or basis, is influenced by a variety of factors, and is subject to important variations.
In table 6, average annual prices are shown for the dominant ${ }^{14}$ wool top future, spot wool tops at Boston, and the most significant grade of raw wool from 1931 to 1939. Appendix table 30 presents the same information on a monthly basis from May 1931 to December 1939. It shows for each month the price spreads between: (1) The dominant wool top future and spot wool (wool basis) ; (2) the dominant future and spot tops at Boston (spot top basis); and (3) spot wool tops and spot wool, both at Boston.

The series of spot top prices represents monthly averages of the quotations published weekly by the Boston Commercial Bulletin for "average fine domestic top in oil" at Boston. This grade of tops seems to sell consistently at prices above those quoted for exchange standard tops, and is probably better in quality than the exchange standard tops, and better than the grades of tops likely to be delivered on futures contracts.

The spot wool prices are those published by the Bureau of Agricultural Economics and continued by the Agricultural Marketing Service. The Territory fine staple grade was selected because (1) it most nearly approaches in quality the wool specified for the exchange standard tops, and (2) it represents a larger proportion of the domestic wool clip than would any other grade officially quoted. However, Territory fine staple wool probably would make tops of somewhat better quality than the exchange standard, and better than the tops likely to be tendered on futures contracts.

The differences between the prices of spot tops and wool as computed from the average fine domestic spot top prices and Territory fine staple wool prices probably conform fairly closely to costs of conversion of fine wool into tops. However, the wool bases computed

[^7]from the dominant futures prices and fine wools reflect smaller quality differences than would be usual, because of the blending of lower grade and pulled wools with the fine wool.

Table 6.-Prices and price spreads: Wool tops, futures and spot, and raw wool, annually, 1931-39
[In cents per pound]

| Year | Wool tops |  | Wool | Price spreads |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Future price ${ }^{1}$ | Average fine domestic spot ${ }^{2}$ | Territory fine staple ${ }^{3}$ | Wool basis ${ }^{4}$ | $\begin{aligned} & \text { Spot top } \\ & \text { basis }{ }^{2} \end{aligned}$ | Spot top and wool ${ }^{6}$ |
| $1931{ }^{7}$ | 69.9 | 82.4 | 61.2 | 8.7 | 12.5 | 21.2 |
| 1932 | 57.3 | 64.9 | 47.0 | 10.3 | 7.6 | 17.9 |
| 1933 | 81.5 | 88.8 | 67.1 | 14.4 | 7.3 | 21.7 |
| 1934 | 90.3 | 103.7 | 81.6 | 8.7 | 13.4 | 22.1 |
| 1935 | 83.4 | 91.5 | 74.8 | 8.6 | 8.1 | 16.6 |
| 1936. | 99.1 | 111.6 | 92.0 | 7.1 | 12.5 | 19.6 |
| 1937 | 104. 3 | 115.9 | 101.9 | 2.4 | 11.6 | 14.0 |
| 1938 | 79.2 | 84.3 | 70.4 | 8.8 | 5.1 | 13.9 |
| 1939 | 88.8 | 100.2 | 82.7 | 6.1 | 11.4 | 17.8 |
| Average. | 83.8 | 93.7 | 75.4 | 8.4 | 9.9 | 18.3 |

[^8]The spread between the prices of the dominant future and of spot tops in Boston, which may be called the spot top basis, varied from 5.1 cents for 1938 to 13.4 cents for 1934 , and averaged 9.9 cents for the entire period. The difference between the price of spot wool and spot tops, both in Boston, varied from 13.9 cents for 1938 to 22.1 cents for 1934 , and averaged 18.3 cents for the entire period. As might be expected, the avcrage of this spread corresponds rather closely to the cost of converting fine wool into wool tops.

Very commonly the spot wool basis, the difference in price between spot wool and wool top futures, is quoted as a negative figure, or the number of cents "off" the future. Here, however, the spreads are shown as positive figures, except in the few instances where the spot wool price exceeded the price of the dominant future. From May 1931 to the end of 1939 the average annual wool basis varied from 2.4 cents per pound in 1937 to 14.4 cents per pound in 1933 off the dominant future. The average for the whole period was 8.4 cents per pound. Because the quality of the tops and raw wool for which prices are given was probably somewhat better than the exchange standard, the average spot top bases are somewhat higher than they would be if prices of wool and tops of lower quality were used, and the wool bases are proportionately lower.

It will be noted from figure 1 that the wool basis fluctuated frequently and widely from the average for the period. It attained the highest levels during the last 7 months of 1933 and the first 3 months of 1934. This was a period of very steeply rising prices from the extremely low levels of the depression year of 1932. During these months futures prices rose even more steeply and to relatively higher levels than did wool prices, resulting in a high wool basis. During

5 of the 6 months from September 1933 to February 1934 the wool basis averaged 20 cents per pound or higher. However, this is the only period in which the wool basis rose markedly above the general average level.

This period of rapidly rising and relatively high prices was followed by a period of declining prices, low levels of wool consumption by mills and top makers, and hence a very slow movement of wool into consumption channels. During the months from May 1934 to February 1935 the wool market was so inactive that wool price quotations were largely nominal. It is more than doubtful that the quotations represent prices at which sizable quantities of wool could have been sold. ${ }^{15}$ The apparent wool basis for the Territory fine staple grade


Figure 1.-Price spreads of the dominant wool top future, spot wool top and spot wool (Territory fine staple, at Boston), by months, May 1931 to December 1939.
during these months was below 6 cents and for January 1935 it dropped to zero. For the reason given above, the apparent wool basis for these months should be interpreted with reserve.

The wool basis dropped sharply and to low levels during the last 3 months of 1937 and January 1938, the extreme dip occurring in November 1937 when the futures price fell to nearly 5 cents below the price of wool. It will be recalled that wool tops are semiprocessed products and the futures calling for delivery of tops ordinarily sell above the raw material, spot wool. The 10 months beginning with April 1937 was a period of markedly declining wool prices from the high level reached during the winter of 1936-37. Toward the end of this decline in prices trading in wool top futures increased rapidly. During the last 3 months of 1937 trading exceeded by nearly 50 percent the volume for the entire preceding calendar year. Accompanying this increased volume of trading was a spectacular growth in the membership of the wool top exchange. During the 3 months October to December the number of class B memberships increased from 24 to 66, or 175 percent. In November alone 24 new memberships were added. It is probable that the sudden and large increase

[^9]in exchange memberships and trading was to a considerable extent due to a desire on the part of firms in the wool trade to become eligible for the member's lower commission rates and to check further inventory losses by hedging in the futures market. Apparently the futures market was still too thin to absorb this volume of hedge selling without a temporary dislocation in the futures price and hence in the wool basis. Howerer, the market continued to broaden, and by March 1938 the wool basis had returned to a more normal relationship.

Reference to figure 1 discloses two other periods when the wool basis, as measured by prices of domestic wools, declined to low levels. These periods were the first 4 or 5 months of 1937, and the approximately 6 months beginning with October 1939. During February 1937 and the 5 months' period beginning with October 1939 the wool


Figure 2.-Spot wool basis, by monthe, for clip years 1931-32 to 1939-40. . March future minus Territory fine staple wool, at Boston.
top futures price was below the price of Territory fine staple wool. These two periods were ones in which there developed temporary shortages or "squeezes" in domestic wools, with the result that prices for domestic wools rose to levels substantially higher than those at which foreign wools could be and were imported. The rules of the wool top exchange permit the fulfillment of future contracts by delivery of tops combed from wools grown in Australia, Argentina, Great Britain, New Zealand, South Africa, and Uruguay. It is to be expected that the futures prices will tend to reflect the price levels of the relatively cheapest tops that can be delivered on the exchange. It seems clear that during the two periods in question the futures prices were largely determined by the prices of certain foreign wools, which, at the time, were materially cheaper than comparable grades of domestic wools. As a result the wool bases for domestic wool were abnormally low.

The fluctuations in the spot wool basis through the clip year, and from season to season, may be more clearly observed by inspection of figure 2. Therein, the spot wool bases, as computed from the March future, are plotted in parallel. by months, for each of the clip
scasons (April to March) since the exchange was organized. The March future basis was used in figure 2 because it aroids the change in prices and bases incident to the change from the future of one year to the future of the succeeding year. It is difficult to discern in the chart, by inspection, any pronounced seasonal trend in the basis. This difficulty is increased by the wide fluctuations in the basis during the special periods previously described. Apparently there was some tendency for the basis to rise during the months of Miay to September, when the new clip was moving out of producers' hands, as compared with the basis during the remaining months.
Of prime importance to hedging traders, in connection with the wool basis, is the relative price level of the futures maturing at different dates. The normal relationship between the prices of the several


Figure 3.-Wool tops: Spread in prices of near and distant futures (as indicated by March and October futures), by months, May 1931 to December 1939.
futures, according to a commonly held theory, is for each future within a clip year to command a premium ovel the price for the current month approximately equal to the costs of carrying certificated wool tops to the date of maturity of the future and of delivering the tops on the exchange. In accordance with this carrying-charge theory, early in the clip year the more distantly maturing futures should be quoted at prices progressively higher in comparison with the current and near futures. Since supplies in the first monthe of the clip year are expected to be more abundant than in later months, old-flip futures may sell at prices above later futures on which deliveries may be made in the new clip year. If, however, relative shortage is expected in the coming clip year the new clip futures may sell above old-clip futures.

A presentation of these relationships on a monthly arerage basis is given in figure 3. Two futures, the March and October, are compared throughout. From April through October the two futures refer to the same clip year. From November through March they refer to different clip years. If the expected relationships described above hold, therefore, the spreads between the two futures should be positive
(the distant higher in price than the near future) from April through October and negative from November through April.

From figure 3 it may be seen that in those periods each year in which the comparisons relate to the same clip (distinguished by the fact that the base is the solid line representing the price of the October future) the March future did in fact usually sell for more than the October future. There were 46 months when this was true, 1 month during which the average prices of the futures did not differ, and 14 months during which the March was lower in price than the October which preceded it. During these 14 months the market was "inverted," that is, the near futures sold at a premium over the more distant futures of the same clip year. The periods of inverted markets were from July through October 1931, during April, May, August, and October 1937, and from May through October 1939. In the last period the inversion was very pronounced, averaging 10.8 cents per pound during October. This was a period during which there was a distinct shortage in available supplies of wool and wool tops.

In the comparisons in figure 3 between the prices of the old-clip future (March) and the succeeding new-clip future (October) the base, representing the price of the March future, is the broken line. In such cases, periods in which the distant (new-clip) future averaged higher than the near future totaled 23 months, while the reverse situation held in 18 months. This latter situation (old-clip future higher than new-clip future) is frequently considered the more likely relationship. It is interesting to note that up to the end of 1935 it had appeared in only 2 months, compared with 19 months in which the opposite relation appeared. Starting with January 1936 there are 20 months for which comparisons are made between old-clip and new-clip futures. The new-clip future was higher during only 4 of these months. This shift raises the question whether in the early years the market had developed sufficiently to provide effective registration of price conditions as between futures.

## GROWTH OF THE MARKET

The most significant measures of the growth of a futures exchange are found in the volume of trading and open contracts. In figure 4 volume of trading in wool top futures on the New York Wool Top Exchange is shown monthly from the establishment of the market in May 1931 to December 1939. Average closing prices of the dominant future are shown monthly for the same period. Open contracts are shown from September 1, 1936, to December 1939. The data for open contracts, however, are not on a uniform basis throughout the period for which they are shown.

It is possible to present three types of series of open contracts depending on the purpose and the data available. The smallest figures would be those of the clearing house, as clearing members combine the positions of all customers in each future and the clearing house records show the net of these combined positions. The total open contracts thus shown on clearing house records may be referred to as the "clearing house net" open contracts. A second type of series would show the total long and short positions of individual customers on the books of clearing members. Where futures commission merchants are the customers of clearing members their accounts with the clearing firms ordinarily show only the nets of the positions of

their customes in the different futures. The totals of the long and short positions of clearing members may be called the "clearing member gross" open contracts. A third type of series would give the total positions of all persons having commitments in the market. This might be characterized as the "futures commission merchant gross" open contracts. It is the most inclusive, but is also the most laborious to compile.

During the survey period, September 1936 to June 1938, the figures on open contracts are complete, including the positions of all individual customers of both clearing members and futures commission merchants. These figures, therefore, are of the third type mentioned above.

As data on open contracts during the period included in the survey have not been published previously and as they are the most comprehensive computation showing total positions of all persons in any futures market, they are shown in appendix table 31 by days for each future. The table also shows the volume of trading including transferable notices as compiled from the records of clearing members of the exchange, purchases and sales separately for both long and short accounts, and the average price for the volume traded. In appendix table 32 daily figures of open contracts in all futures combined, and total purchases and sales for all futures for long and short accounts, are shown. From July 1, 1938, to the end of 1939 the open contracts are derived from information furnished by clearing members of the exchange. From August 1, 1938, the Commodity Exchange Administration has released daily figures of open contracts and volume of trading. Since similar figures for the month of July 1938 have not been made available previously, they are shown in appendix table 33. These figures are of the second type mentioned above and consequently somewhat understate the totals. For the month of June 1938 data were secured showing both the "clearing member gross" open contracts and the "futures commission merchant gross" open contracts. These data indicate that the understatement is probably not more than about 7 percent. Figures on open contracts in each future at the end of each month from August 1936 to December 1939 are shown in table 7.

Monthly figures on volume of trading compiled from records of the clearing association for the full period 1931 to 1939 will be found in appendix table 34. From figure 4 it may be seen that for some time after the organization of the New York exchange the volume of trading showed little evidence of growth. In fact, the trading during the first month, amounting to 475,000 pounds, was exceeded in only 2 of the following 14 months. There was a slow growth, however, and each calendar year from 1932 to 1935 showed an increase in total volume of trading as compared with the previous year. By 1936 a plateau seems to have been reached. That this plateau was not very high is indicated by the fact that in August of that year there was exactly the same total volume of trading as in the first month during which the futures exchange was operated. Starting in the fall of 1936, however, there was a substantial increase in the volume of trading and a year later in the fall of 1937 there was a sharp outburst of trading which carried wool top futures trading to a new level of activity.

Table 7.-Wool top futures: Open contracts by futures, at the end of each month Aug. 31, 1936, to Dec. 29, $1989^{1}$
[In thousands of pounds]

| Date | Future |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { All } \\ \text { futures } \end{gathered}$ | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. |
| 1936 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Aug. 31 | 1,655 | 200 | 10 | 300 |  | 85 |  | 20 |  |  | 455 | 15 | 580 |
| Sept. 30 | 1,330 | 200 | 10 | 295 |  | 190 |  | 20 |  |  | 35 | 15 | 565 |
| Oct. 31 | 1,130 | 225 | 10 | 240 |  | 175 |  | 30 |  |  |  |  | 450 |
| Nov. 30 | 1,815 | 220 |  | 275 | 15 | 395 | 5 | 585 | 100 | 50 | 10 |  | 160 |
| Dec. 31 | 2,325 | 215 | 10 | 225 | 50 | 420 | 70 | 875 | 150 | 50 | 260 |  |  |
| 1937 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Jan. 30 | 2,935 |  | 5 | 125 | 50 | 425 | 55 | 1,110 | 160 | 65 | 940 |  |  |
| Feb. 27 | 3, 365 |  |  | 60 | 50 | 505 | 55 | 1. 265 | 160 | 65 | 1,185 |  | 20 |
| Mar. 31 | 3, 520 |  | 20 |  | 15 | 405 | 45 | 1,165 | 160 | 95 | 1.389 |  | 235 |
| Apr. 30 | 3,645 |  | 20 | 310 |  | 145 | 35 | 800 | 115 | 60 | 1. 555 |  | 605 |
| May 31 | 3, 800 |  | 20 | 685 |  |  | 30 | 690 | 115 | 50 | 1,525 |  | 685 |
| June 30 | 3, 320 |  | 20 | 855 |  | 50 |  | 40 | 115 | 50 | 1. 435 | 25 | 730 |
| July 31 | 2,975 |  | 20 | 955 |  | 65 |  |  |  | 50 | 1,160 | 25 | 700 |
| Aug. 31 | 3, 290 | 30 | 20 | 1,185 |  | 155 |  | 55 |  | 55 | 1,135 | 25 | 630 |
| Sept. 30 | 3, 820 | 60 | 50 | 1,760 | 30 | 410 |  | 280 |  |  | 670 | 25 | 535 |
| Oct. 30 | 4, 385 | 60 | 50 | 1,755 | 20 | 980 |  | 1,000 |  | 75 |  | 15 | 430 |
| Nov. 30 | 5, 790 | 40 | 40 | 1,565 | 5 | 1,140 |  | 1,835 |  | 60 | 995 |  | 140 |
| Dec. 31 | 5, 595 | 15 | 25 | 1,280 | 5 | 1,020 |  | 1,850 |  | 60 | 1,340 |  |  |
| 1938 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Jan. 31 | 6. 400 |  | 10 | 1,060 | 15 | 830 | 19 | 1,735 |  | 60 | 1.950 |  | 720 |
| Feb. 28 | 6. 625 | 5 |  | 205 | 15 | 685 | 15 | 1, 610 |  | 60 | 2, 480 |  | 1,550 |
| Mar. 31 | 6, 155 | 5 |  |  |  | 580 | 10 | 1. 500 |  | 60 | 2,620 |  | 1,380 |
| Apr. 30 | 7, 140 | 5 |  | 400 |  | 565 | 20 | 1,410 |  | 60 | 2,750 |  | 1,930 |
| May 31 | 8, 070 | 5 |  | 1,290 |  |  |  | 1,285 | 25 | 60 | 2, 980 |  | 2,425 |
| June 30 | 8, 600 | 5 |  | 2,130 |  | 160 |  | - 815 | 25 | 60 | 2,735 |  | 2,670 |
| July 29 | 8. 455 | 5 |  | 2,755 |  | 895 |  |  | 25 |  | 1. 865 |  | 2,910 |
| Aug. 31 | 8, 165 | 5 |  | 2,815 |  | 1,380 |  |  |  |  | 1,630 |  | 2.335 |
| Sept. 30 | 7,160 | 5 |  | 2, 705 |  | 1,575 |  | 150 |  |  | 585 |  | 2,140 |
| Oct. 31 | 7,430 | 15 | 130 | 3,300 |  | 1,900 |  | 805 |  |  |  |  | 1,280 |
| Nov. 30 | 7,145 | 5 |  | 3, 120 |  | 2,105 |  | 1,005 |  |  | 560 |  | 350 |
| Dec. 30 | 6,380 | 5 |  | 2,350 |  | 1,905 |  | 1,095 |  |  | 1,025 |  |  |
| 1939 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Jan. 31 | 6, 115 |  |  | 1,140 |  | 1,890 |  | 1,460 |  |  | 1,475 |  | 150 |
| Feb. 28 | 5, 595 |  |  | 265 |  | 1,690 |  | 1,600 |  |  | 1,715 |  | 325 |
| Mar. 31 | 5, 680 |  |  |  |  | 1,305 |  | 1,400 |  |  | 1.885 |  | 1,090 |
| Apr. 29 | 6, 025 |  |  | 455 |  | 470 |  | 1, 310 |  |  | 2,330 |  | 1.460 |
| May 31 | 6,325 |  |  | 1,295 |  |  |  | 930 |  |  | 2,420 |  | 1,680 |
| June 30 | 6, 000 |  |  | 1,385 |  | 145 |  | 245 |  |  | 2, 620 |  | 1,605 |
| July 31 | 6, 325 |  |  | 1,840 |  | 335 |  |  |  |  | 2,185 |  | 1,965 |
| Aug. 31 | 7,160 |  |  | 2,695 |  | , 385 |  |  |  |  | 1,870 |  | 2, 210 |
| Sept. 30 | 10,585 | 10 | 10 | 5,510 |  | 2,080 |  | 860 |  |  | 385 | 10 | 1,720 |
| Oct. 31 | 11, 180 | 10 | 10 | 5,870 |  | 2, 625 |  | 1. 050 |  |  |  |  | 1. 615 |
| Nov. 30 Dec. 29 | 12,000 13,610 | 85 |  | 6,840 7,360 |  | 2,940 3,550 |  | 1,375 1, 790 |  |  | $\stackrel{225}{825}$ |  | 620 |
| Dec. 29 | 13,610 | 85 |  |  |  | 3, 500 |  | 1,790 |  |  | 825 |  |  |

1 Open contract data in this table were computed on the basis of the complete record of trading for the survey period to June 30,1938 . From July 1, 1938, the data were compiled rom reports made by clearing members of the exchange.

It seems likely that open contracts were not large prior to the beginning of the survey period, September 1, 1936. From that date until the middle of 1938 there was a marked expansion of open contracts. The period covered by the survey, therefore, was clearly one of growth in both volume of trading and open contracts.

Prior to September 1936 the actual development of the futures market was very slow indeed. Up to that time very little relationship can be discerned between price movements and volume of trading, although on most futures markets fairly close relationships are found. Violent price movements are usually associated with sharp
increases in trading. Rising prices are commonly accompanied by larger increases than declining prices, but periods of rapid price movement, either up or down, are almost invariably characterized by greater trading activity than periods in which little change in price occurs. During the first 5 years of the life of the wool top futures market, however, there was no evidence of any significant relation between price movements and trading activity. Sharp swings in prices occurred with little or no increase in volume of trading. Some relation between the price rise in the autumn of 1936 and futures trading became apparent, and a very definite relationship may be seen between the price decline in 1937 and the increase in volume of trading and open contracts. The expansion of open contracts is probably a better measure of the fundamental growth in the market than volume of trading, and open contracts increased with considerable consistency throughout the survey period. Both open contracts and volume of trading declined from the middle of 1938 to the middle of 1939, a period in which there was relatively little price movement. With the outbreak of war in September 1939 there was a tremendous increase in volume of trading in wool top futures. This, of course, accompanied the sharp increase in prices and was also associated with a marked increase in open contracts. It may be noted that in this instance as well as in the fall of 1937 and early in 1938 open contracts expanded more slowly, but more persistently, than the volume of trading.

The period of a little more than 3 years from the beginning of the survey period in the fall of 1936 to the end of 1939 may be looked upon as a period in which the New York wool top futures market matured greatly. Volume of trading increased from 1,100,000 pounds. in September 1936 to $10,780,000$ pounds in December 1939, or almost 10 times. Open contracts expanded from $1,655,000$ pounds on August 31, 1936, to a peak of 13,845,000 pounds on December 22, 1939 According to this measure the market was 8 times larger on the later date than on the former. By the later date the market was much broader, much more definitely related to prices, and presumably much more important in the marketing of wool products than it had been 3 years earlier.

## COMMITMENTS IN WOOL TOP FUTURES, AUGUST 31, 1936, AND JUNE 30, 1938: A CONTRAST

An increase in volume of trading such as that which occurred within the survey period, that is, in 1936 and particularly in the latter part of 1937, could have arisen from an increased number of traders in the market or from an enlargement of the scale of activity of traders. already in the market. To some extent both of these factors entered in, but the most striking changes were brought about by the participation of an increased number of traders. This can be shown most clearly by contrasting the number of traders and the positions they held in the market at the beginning of the complete survey with similar data for the last date of the survey. At the beginning, on August 31, 1936, 58 traders had positions in the wool top market. The groupings into which these traders may be classified are shown in table 8 and by the solid bars in figure 5. Their commitments in the market are also given in table 8 and graphically presented in figure 6 .

It is evident at a glance that participation in the market was very greatly restricted. Six top makers held 32 percent of the total long and 64 percent of the total short commitments. Thirteen wool


Figure 5.-Number and type of traders in the New York wool top futures market on Aug. 31, 1936, and June 30, 1938.
dealers held approximately 23 percent of both long and short positions. Ten mills held approximately the same proportion of the long interest but only a negligible proportion of the short interest. These mem-


Figure 6.-Total commitments of different classes of traders in the New York wool top futures market on Aug. 31, 1936, and June 30, 1938.
bers of the wool industry, totaling just half in number of all the traders, constituted the major interest in the wool top futures market as it then existed. All other traders combined held 23 percent of the long and only 12 percent of the short commitments in the market.

At the end of the survey period, on June 30, 1938, there were 218 traders in the wool top futures market. The number of traders in each classification is shown in figure 5 and table 8 while their commitments are presented in figure 6 and table 8.

Table 8.-Classification of traders and commitments in New York wool top futures. on Aug. 31, 1936, and on June 30, 1938

| Classification | Aug. 31, 1936 |  |  |  |  | June 30, 1938 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Traders | Total commitments |  |  |  | $\begin{gathered} \text { Trad- } \\ \text { ers } \end{gathered}$ | Total commitments |  |  |  |
|  |  | Long |  | Short |  |  | Long |  | Short |  |
|  |  | Amount | Percent of total | Amount | Percent of total |  | Amount | Percent of total | Amount | Percent of total |
| Wool growers | $\begin{gathered} \text { Num- } \\ \text { ber } \\ 2 \end{gathered}$ | $1,000 \mathrm{lb}$ 50 | Percent 3. 0 | $1,000 \mathrm{lb}$ 20 | Percent 1. 2 | Number 6 | $1,000 \mathrm{lb}$. 80 | Percent 0.9 | $\begin{array}{r} 1,000 \mathrm{lb} . \\ 40 \end{array}$ | Percent C. 5 |
| Wool dealers | 13 | 375 | 22.7 | 385 | 23. 3 | 64 | 2,720 | 31.6 | 2, 790 | 32.4 |
| Top makers | 6 | 525 | 31.7 | 1,065 | 64.4 | 12 | 1, 510 | 17.6 | 5,385 | 62.6 |
| Mills | 10 | 370 | 22.4 | 10 | . 6 | 31 | 2,095 | 24.4 | 125 | 1.5 |
| Clothing manufacturers | 1 | 5 | . 3 |  |  | 11 | 290 | 3.4 |  |  |
| Futures commission merchants and floor brokers | 4 | 50 | 3.0 | 75 | 4.5 | 11 | 235 | 2.7 | 180 | 2. 1 |
| Speculators connected with the wool trade. | 9 | 85 | 5.1 | 55 | 3.3 | 26 | 705 | 8.2 | 25 | . 3 |
| Other speculators | 9 | 110 | 6.7 | 30 | 1.8 | 51 | 610 | 7.1 | 55 | . 6 |
| Foreign accounts. | 4 | 85 | 5.1 | 15 | . 9 | 6 | 355 | 4.1 |  |  |
| Total | 58 | 1,655 | 100.0 | 1,655 | 100.0 | 218 | 8, 600 | 100.0 | 8,600 | 100.0 |

Between the beginning and the end of the survey period the number of traders had increased to slightly less than four times the number in the market at the beginning. The combined positions of all traders, however, had increased to somewhat over five times their earlier total. It may be seen, therefore, that growth in the market was due to an increase both in the number of traders and in the size of positions. A more accurate conception of the relative importance of these two sources of growth can be obtained from table 9 which shows the average positions of the different classes of traders on August 31, 1936, and June 30, 1938. The number of participants on the long side increased to more than four times the earlier number, while the average long position increased from 36,000 to 43,000 pounds. For some classes of traders, however, the increase in average commitments was quite striking. Top makers, for example, increased their average long commitments from 88,000 to 151,000 pounds, while the average for mills rose from 41,000 to 72,000 pounds. The increase in total short commitments arose almost equally from a larger number of participants and larger average positions. The number of traders with short positions increased from 24 to 53 , or slightly more than double. The average position increased in almost exactly the same proportion, from 69,000 to 162,000 pounds.
In spite of the expansion of total commitments and the increase in number of traders in each class between 1936 and 1938, the dominant position of "trade" influences in the market was not changed. Perhaps the most striking fact revealed by a comparison of commitments at the beginning and end of the survey is the extent to which wool
dealers entered the market. At the earlier date there were only 13 dealers, and they held 23 percent of both the long and the short commitments in wool top futures. On the later date there were 64 dealers in the market, and their holdings-still almost exactly bal-anced-were approximately 32 percent of the commitments on each side. The number of top makers had increased from 6 to 12 . They were small in numbers, but large in holdings, especially on the short side. In 1936 they held 64 percent of all short positions; in 1938 their proportion of short holdings was only slightly less ( 63 percent). It is interesting to note, however, that the proportion of the long commitments held by top makers had declined from 32 to 18 percent. Mills were the other important trade or industry interest in the market, and their positions were almost exclusively long. They held 22 percent of the long commitments in 1936 and 24 percent in 1938.

Table 9.-Wool top futures: Number of traders and average size of positions held by different types of traders on Aug. 31, 1936, and on June 30, 1938

| Type of trader | Aug. 31, 1936 |  |  |  | June 30, 1938 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Long position |  | Short position |  | Long position |  | Short position |  |
|  | Traders | A verage size | Traders | Average size | Traders | A verage size | Traders | A verage size |
| Wool growers | Number | $\begin{array}{r} 1,000 \quad \mathrm{lb} . \\ 25 \end{array}$ | Number | 1,000 $\begin{array}{r}\text { lb } \\ 20\end{array}$ | Number | $1,000 \mathrm{lb}$ 27 | Number 3 | $1,000 \mathrm{lb} .$ |
| Dealers | 9 | 42 | 8 | 48 | 55 | 49 | 23 | 121 |
| Top makers | 6 | 88 | 3 | 355 | 10 | 151 | 9 | 598 |
| Mills | 9 | 41 | 1 | 10 | 29 | 72 | 3 | 42 |
| Clothing manufacturers .-.-- | 1 | 5 |  |  | 11 | 26 |  |  |
| Futures commission merchants | 3 | 17 | 3 | 25 | 10 | 24 | 7 | 26 |
| Industry-connected speculators | 6 | 14 | 4 | 14 | 25 | 28 | 2 | 12 |
| Speculators not related to industry | 8 | 14 | 2 | 15 | 49 | 12 | 6 | 9 |
| Foreign traders.-- | 2 | 42 | 2 | 8 | 6 | 59 |  |  |
| Total | 46 | 36 | 24 | 69 | 198 | 43 | 53 | 162 |

A comparison of the data presented in table 8 for the beginning and end of the survey period demonstrates that wool growers have had a negligible participation in the wool top futures market. There were only two of them in the market on August 31, 1936, and only six on June 30, 1938. While their combined holdings had increased, the proportion of the total commitments represented had declined to less than 1 percent.

Considerable proportions of the positions held by accounts in every class were undoubtedly speculative. There were also three groups whose positions must have been almost exclusively speculative. These were futures commission merchants and floor brokers, the personal accounts of individuals connected with the wool trade, and persons having no connection with the wool industry. The positions of futures commission merchants and floor brokers were fairly evenly divided between the long and short sides of the market, but the other speculative groups, as well as the foreign accounts, were predominantly long. This preference for long commitments was proportionately stronger in 1938 than in 1936.

## FUTURES COMMITMENTS AND PRICE MOVEMENTS

The cross-section pictures of the market at the beginning and end of the survey may be supplemented by an examination of changes in the commitments of different classes of traders during this period. This examination has been somewhat expanded by a study of the commitments of the larger traders in the market down to the end of 1939. The information on commitments during the survey period from September 1, 1936, to June 30, 1938, has been derived from the data compiled for all trades during this period, and presents a breakdown of the "futures commission merchant gross" open contracts.

As stated in the introduction, the data for the partial-survey period from July 1, 1938, to July 31, 1939, include information on all trades during that period by accounts which at any time were in reporting status, i. e., had commitments in one future amounting to 125,000 pounds or more. Data for those times during the period when particular accounts were not in reporting status were obtained by special investigation. The commitments of traders who did not at any time during the period attain reporting status were estimated by subtracting the totals for the larger traders from total commitments as compiled by the Commodity Exchange Administration.

From August 1, 1939, to December 31, 1939, the information supplied by traders in reporting status was grouped by type of trader according to the classification used for the survey and partial-survey periods. In this case, however, data for particular traders were included only for those dates on which these traders were in reporting status. As in the case of the partial survey the information for nonreporting traders was estimated by subtracting the data for reporting traders from the total figures compiled by the Commodity Exchange Administration.

The wool top futures commitments held by different classes of traders at the close of business on Friday of each week from September 4, 1936, to December 29, 1939, are shown in figure 7 and appendix tables 36,37 , and 38 . Figure 7 is divided into three segments corresponding to the three periods described above. A curve showing the average closing price of the dominant future is also presented to facilitate comparison of changes in commitments with price movements.

As figure 7 covers a period for which information on open contracts is available, both open contracts and volume of trading have been considered in determining the dominant future, while only the latter was considered in table 6 , appendix table 30 , and figures 1 and 4. Weekly prices of the dominant future from September 1936 to December 1939 are shown in appendix table 35. It will be noted that commitments are shown for four classes of traders: Dealers, top makers, mills, and other traders. Practically throughout the entire period covered by figure 7, top makers were the most important class on the short side of the market. Dealers were second in importance and mills held large short positions only in the period from October 1937 to June 1938, and again from October to December 1939. On the long side, top makers were again important but toward the end of the survey period were exceeded by dealers and also at times by mills. It is evident from the contrast between the survey and post-survey period that a considerable proportion of long commitments was held by top makers, dealers, and mills whose positions were too small to require reports to the Commodity Exchange Administration. Con-
CENTS PER
POUND 잉 으 으 아 상


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sequently it is not possible to have a clear picture of the holdings of different types of traders on the long side from the first of July 1938 to the end of 1939 .

From figure 7 it will be seen that there were three distinct periods in which total commitments increased markedly. The first wave of expansion started early in November 1936 and continued until the latter part of 1937. The beginning of the increase came toward the end of the sharp advance in prices in the last few months of 1936, but the major part of the increase in commitments came during the first part of 1937 when wool top prices were relatively high but subject to fairly wide fluctuations between about $\$ 1.08$ and $\$ 1.15$ per pound. This tendency for commitments to increase for some months after a major price movement can be observed for each of the large price swings on the chart.
The second wave of increasing commitments started in July 1937 and, except for a minor trough in March and April 1938, extended to the close of the survey period at the end of June 1938. The average closing price of the dominant future (October) was 112.6 cents for the week ended July 31, 1937. By the week ended February 11, 1938, the average closing price had fallen to 73.5 cents. Most of the great increase in open contracts late in 1937 followed this decline of almost 40 cents in wool top futures prices.

The fact that waves of increasing commitments culminated in June 1937 and June 1938 raises the question whether these increases in commitments were related to stocks of wool and tops. The data published in the Quarterly Wool Stock Report of the Bureau of the Census, United States Department of Commerce, indicates that such stocks are ordinarily high toward the end of June. However, they are many times greater than commitments in wool top futures and, therefore, any relationship must be remote.
Total open contracts were declining during the first part of the partiol-survey period. This decline on the short side was accounted for largely by decreases in positions of top makers. On the long side it is difficult to have a very clear notion of the importance of different classes of traders since nonreporting traders were such an important portion of the total group. It is interesting to note, however, that reporting mills had become the most important group of reporting traders, the long positions of both reporting dealers and reporting top makers being less significant. This period of declining commitments was one of relatively stable prices.

A third great expansion in commitments followed the spectacular price rise of early September 1939. The outbreak of war in Europe was followed by an increase in the price of the dominant wool top future from a level of about 80 cents to about $\$ 1.15$. From the first of September to the end of December, open contracts almost doubled, increasing from about $7,000,000$ pounds to over $13,000,000$ pounds. Because of lack of information on nonreporting traders it is impossible to state what classes of traders were responsible for the great increase in long commitments. It is also impossible to say to what extent this growth was due to an influx of new traders and to what extent to an increase in the positions held by traders who were already in the market at the outbreak of war in September 1939.

## ENTRANCE OF TRADERS INTO THE FUTURES MARKET

The commitments in the wool top futures market were, of course, the result of the trading of a varying number of traders. A comparison of the number of traders in the market at the beginning and end of the survey has already been made. This comparison has been expanded in table 10 into an examination on a quarterly basis of the timing of the growth in the market between these two points. The number of traders of each type in the market at the beginning and end of the survey is shown and the number entering the market during each quarter is also given. It will be seen that there were $431^{16}$ traders who at some time during the survey period traded in wool tops, but as will be shown later the maximum number in the market at any one time was much smaller. The slow growth of the market early in the survey period is illustrated by the fact that only 1 new trader came into the market during September 1936. In the fourth quarter of 1936, however, 41 traders who were not in the market at the end of August made trades. It is impossible, of course, to say whether these trades constituted the first experience of these traders in the wool top futures market. It seems likely, however, that some of them had had previous trades.

Table 10.-Traders entering the wool top futures market, by type, quarterly, October 1936 to June 1938

| Period | Total | Type of trader ${ }^{1}$ |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| In the market Aug. <br> 31, 1936 | Number 58 <br> 242 | $\begin{gathered} \text { Number } \\ 2 \end{gathered}$ | $\begin{gathered} \text { Number } \\ 13 \end{gathered}$ | $\begin{gathered} \text { Number } \\ 6 \end{gathered}$ | $\begin{gathered} \text { Number } \\ 10 \end{gathered}$ | $\begin{gathered} \text { Number } \\ 1 \end{gathered}$ | $\begin{gathered} \text { Number } \\ 4 \end{gathered}$ | $\begin{gathered} \text { Number } \\ 9 \end{gathered}$ | $\begin{gathered} \text { Number } \\ 9 \end{gathered}$ | Number |
| 4th quarter |  |  | 6 | 1 | ${ }^{2} 10$ | 3 |  | 5 | 12 | 5 |
| 1st quarter. | 54 | 1 | 12 |  | 12 | 2 | 1 | 2 | 19 | 5 |
| 2 d quarter | 20 |  | 6 | 2 | 2 |  |  | 6 | 4 |  |
| 3 d quarter | 21 | 3 | 10 |  |  |  | 1 | 1 | 3 | 3 |
| 4 th quarter | 85 | 2 | 22 | 4 | 7 | 2 | 13 | 11 | 20 | 4 |
| 1938 |  |  |  |  |  |  |  |  |  |  |
| 1st quarter | 75 | 5 | 12 |  | 10 | 3 | 5 | 8 | 29 | 3 |
| 2d quarter | 76 | 1 | 17 | 1 | 7 | 6 | 2 | 10 | 31 | 1 |
| Total | 431 | 14 | 98 | 14 | 58 | 17 | 26 | 52 | 127 | 25 |
| In the market June $30,1938$ | 218 | 6 | 64 | 12 | 31 | 11 | 11 | 26 | 51 | 6 |
| Percentage in market on June 30, 1938 | Percent $50.6$ | $\begin{gathered} \text { Percent } \\ 42.9 \end{gathered}$ | $\begin{gathered} \text { Percent } \\ 65.3 \end{gathered}$ | Percent 85.7 | Percent 53.4 | Percent 64.7 | Percent 42.3 | Percent $50.0$ | Percent 40.2 | Percen 24.0 |

${ }^{1}$ Index to type numbers: 1, wool growers; 2, dealers; 3, t $\rho$ p makers; 4, mills; 5, clothing manufacturers: 6 , futures commission merchants; 7 , industry-connected speculators; 8 , speculators not related to industry; 9 , foreign traders
${ }^{2}$ Includes the only trader entering the market in September 1936.
In the first quarter of 1937, 54 new names appeared in the list of traders in the futures market. In the second and third quarters of that year only 20 and 21 names, respectively, were added to the list. The period of most rapid growth in volume of trading was in the last

[^10]quarter of 1937. This sharp increase in volume of trading was accompanied by the largest addition to the number of traders in the market found in any quarter during the survey period. Eighty-five traders were added. While volume of trading during the remainder of the survey period was not appreciably greater than during the last quarter of 1937, 75 new traders came into the market in the first quarter of 1938, and 76 in the second. Commitments, of course, were expanding at this time although there was no marked increase in volume of trading.

The fact that toward the end of the survey period a considerable number of new traders were entering the market with little increase in the total volume of trading indicates that there must have been considerable turn-over in the roster of traders. That this was the case is shown by the comparison of the number of traders in the market on June 30, 1938, the end of the survey, with the total of those in the market at the beginning of the survey, plus those who entered during the 22 -month period. Two hundred thirteen or just under half of the traders who had entered the market did not have a position at the end of June 1938. As may be seen in table 10 , the turn-over of some types of traders was decidedly greater than for other types. Twelve of the 14 top makers were still in the market, but only 6 of the 14 wool growers. Fifty-one of the 127 speculators not connected with the wool trade, or just over 40 percent, were still in the market while 64 of the 98 wool dealers had positions at the end.

## EXIT OF TRADERS FROM THE WOOL TOP FUTURES MARKET

The body of futures traders, like any other group, has a constantly changing membership. New traders enter the market, while others who have been trading close out their positions. Generalizations on trader turn-over in the wool top futures market during the survey period must be interpreted with some qualifications. The fact that a trader was not in the market on August 31, 1936, does not indicate necessarily that he had not traded prior to the beginning of the survey period. Also the fact that a trader who had operated in wool top futures was no longer in the market on June 30, 1938, does not mean that he may never trade again. Moreover, cessation of trading by an individual should not be thought of necessarily as the consequence of unsuccessful trading operations.

From table 11 it is evident that the survey period was altogether too short to provide the basis for completely adequate generalizations about the average life of traders' experiences in the wool top futures market. It is clear, however, that many such experiences are extremely brief. Thirteen of the 58 traders who had positions at the beginning of the period studied retired from the market before the end of 1936, or within 4 months.

There were other traders who traded over much longer periods. Half of those who had positions on August 31, 1936, were in the market on June 30, 1938. These longer-lived accounts, however, were made up, in large measure, of trade interests. All the top makers who had positions at the beginning of the survey were in the market at the end. Ten of the original 13 wool dealers and 3 out of 4 futures commission merchants also held positions at the conclusion of the
survey period. Only 5 of the 25 traders who did not fall into these trade categories were trading after the elapse of 22 months. Three out of 9 speculators connected with the wool trade, 1 out of 9 other speculators, and 1 wool grower complete the list of those remaining. The clothing manufacturer and the foreign accounts were not in the market at the end.

Table 11.-Wool top futures: Distribution of traders leaving the market during the survey period, and those in the market on June 30, 1938, classified by period of entry

| Period of exit from market | $\begin{gathered} \text { Traders } \\ \text { in } \\ \text { market } \\ \text { at } \\ \text { begin- } \\ \text { ning } \end{gathered}$ | Period of entry into market |  |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1936 |  | 1937 |  |  |  | 1938 |  |  |
|  |  | $\begin{aligned} & \text { Sep- } \\ & \text { tember } \end{aligned}$ | Fourth quarter | First quarter | Second quarter | $\begin{aligned} & \text { Third } \\ & \text { quar- } \\ & \text { ter } \end{aligned}$ | Fourth quarter | First quar ter | $\begin{aligned} & \text { Second } \\ & \text { quar- } \\ & \text { ter } \end{aligned}$ |  |
| 1936 | $\begin{aligned} & 4 \\ & 9 \end{aligned}$ | 1 | 6 |  |  |  |  |  |  |  |
| September <br> 4th quarter |  |  |  |  |  |  |  |  |  | 4 16 |
| 1937 |  |  |  |  |  |  |  |  |  |  |
| 1st quarter | 4 |  | 9 | 11 |  |  |  |  |  | 24 |
| 2 d quarter- | 3 |  | 6 | 13 | 4 |  |  |  |  | 26 |
| 4th quarter-- | 2 |  | $\stackrel{1}{2}$ | ${ }_{3}$ | 4 | 3 | 21 |  |  | ${ }_{35}^{11}$ |
| 1938 |  |  |  |  |  |  |  |  |  |  |
| 1st quarter | 1 |  | 1 | 5 | 2 | 4 | 19 | 16 |  | 48 |
|  |  |  |  |  |  |  |  |  |  |  |
| In market at end..- | 29 |  | 15 | 17 | 8 | 8 | 38 | 42 | 61 | 218 |
| Total | 58 | 1 | 41 | 54 | 20 | 21 | 85 | 75 | 76 | 431 |

Table 12.-Number of traders in wool top futures market by quarters, Aug. 31, 1936, to June 30, 1938


The number of traders in the market at the end of each quarter in the survey period may be seen in figure 8 and table $12 .{ }^{17}$ The greatest

[^11]proportionate increase took place in the fourth quarter of 1937. It may be observed that the number of traders leaving the market was greater than the number entering in September 1936 and in the


Figure 8.-Wool top futures: Number of traders entering, leaving, and in the New York market, by quarters, Aug. 31, 1936, to June 30, 1938.
second quarter of 1937 . Turn-over of traders was relatively high in the first half of 1938. In general there is a persistent tendency toward an increasing number of participants in the wool top futures market.

## OUTCOME OF OPERATIONS OF TRADERS LEAVING THE MARKET

It might be inferred that the financial outcome of the trading of all those who left the market had been unfortunate and that retirement from the market was usually caused by financial reverses. An examination of the financial results of the futures trading of such traders shows that this was not the case. Of the 213 individuals who stopped trading during the survey period, 115 had made profits on their trading and 98 had suffered losses. These figures are shown in ta le 13 which also supplies, for comparative purposes, information on the results of trading by those who remained in the market. The computations of profits and losses upon which the above statement was based were obtained by comparing the buying and selling prices of the futures traded. No allowance was made for commission charges. If a rough allowance for commissions is made by counting all profits amounting to less than one-half of a cent per pound as losses, 104 of the traders who left the market would show profits and 111 would show losses. ${ }^{18}$ While approximately as many of those who left the market had profits as had losses, those who remained in the market at the end of the survey period included a relatively higher percentage of persons with profits. As may be seen from table 13, 137 traders who were in the market at the end of the period had made profits on their trading while 81 had losses, including their accrued profits and losses on June 30, 1938. When an allowance is made for commission charges, however, the numbers with profits and losses are not significantly different. Generally it appears that for both groups of traders roughly half had been successful and half of them lost money.

Table 13.-Wool top futures: Traders classified by profits or losses, and whether they were in the market on June 30, 1938

| Classification | Leaving market during survey period |  | In market at end t |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathrm{A}^{2}$ | B ${ }^{3}$ | A 2 | $B^{3}$ | $\mathrm{A}^{2}$ | $\mathrm{B}^{3}$ |
| Profits | 115 | 104 | 137 | 111 | 252 | 215 |
| Losses | 498 | 109 | 481 | 107 | 179 | 216 |
| Total | 213 | 213 | 218 | 218 | 431 | 431 |

${ }^{1}$ Includes accrued profits or losses on positions held on rune 30, 1938.
${ }_{2}$ Profits and losses computed as dificrences between buying and selling prices only.
${ }^{3}$ All profits of less than $1 / 2$ cent per pound counted as losses as a rough adjustment for commission charges.
${ }_{4}^{4}$ Includes 1 trader who bought and sold at the same price.
When consideration is given to the amounts of the profits and losses involved, a somewhat different picture emerges. In table 14 the net profits and losses, not including commission charges, of the traders who left the market are shown by type of trader. In this computation

[^12]the net result of operations in all futures traded was determined for each trader before summaries for classes of traders were prepared. It may be seen that the 115 traders who had profits had net gains of $\$ 137,765$ while the 98 whose trading was unsuccessful lost $\$ 222,465$. The outcome of the trading of those who still held positions on June 30, 1938, including the accrued profits or losses at the close of the survey period, is also shown in table 14. The 137 traders who had profits had total gains of $\$ 1,033,780$ while the remaining 81 traders with positions had losses totaling $\$ 949,080$. It will be noted that throughout arerage profits were less than average losses, a situation which seems to have been characteristic of the wool top futures market in general. This point will be developed further below.

Table 14.-Wool top futures: Outcome of operaiions ${ }^{1}$ of traders leaving the market during the survey period, and in the market on June 30, 1938, classified by type.

| Type of trader | Leaving market during survey period |  |  |  | In market on June 30, 1938 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Net profit |  | Net loss |  | Net profit |  | Net loss |  |
|  | Traders | Amount | Traders | Amount | Traders | Amount | Traders | Amount |
| Wool growers | Number | $\begin{array}{r} \text { Dollars } \\ 9,905 \end{array}$ | $\begin{gathered} \text { Number } \\ 4 \end{gathered}$ | Dollats 9, 090 | $\left\|\begin{array}{c} \text { Number } \\ 3 \end{array}\right\|$ | $\begin{gathered} \text { Dollars } \\ 2,310 \end{gathered}$ | ${\underset{3}{N u m b e r}}^{N}$ | Dollats $2,160$ |
| Dealers | 18 | 46,090 | 16 | 29,810 | 38 | 361, 180 | 225 | 106, 790 |
| Top makers | 2 | 1,740 |  |  | 10 | 498, 030 | 2 | 685, 100 |
| Mills .-. | 13 | 41,900 | 14 | 117, 065 | 16 | 87, 640 | 15 | 115, 725 |
| Clothing manufacturers | 4 | 2, 620 | 2 | , 495 | 6 | 4,540 | 5 | 1,400 |
| Futures commission merchants | 10 | 3, 480 | 5 | 1,315 | 10 | 12, 080 | 1 | 3, 985 |
| Industry-connected specula- tors | 12 | 10,415 | 14 | 42,435 | 17 | 37,715 | 9 | 12. 600 |
| Other speculators | 46 | 19.380 | 229 | 11.480 | 34 | 17, 010 | 17 | 9. 770 |
| Foreign traders | 6 | 2. 235 | 13 | 10,775 | 3 | 13, 275 | 3 | 11,550 |
| Total | 115 | 137, 765 | 297 | 222, 465 | 137 | 1, 033, 780 | 280 | 949, 080 |

${ }^{1}$ Computed from the net value of all futures combined bought or sold by each trader.
2 Excludes 1 trader who bought and sold at the same price.

## PROFITS AND LOSSES

In any futures market the profits always equal the losses. The clearing house procedure, in which the clearing house becomes seller to all buyers and buyer from all sellers, is made possible by this fact. For the clearing house, interposed between the parties to the transaction, finds that it receives from those who lose exactly the amount necessary to pay those who gain. It is true that in the case of delivery of the commodity another factor of possible gain or loss enters into the picture--the acquisition or disposal of the spot commodity. Payment for such deliveries, however, is made at the official settling price, and for that part of the transaction which is strictly confined to the futures market the losses of those on one side exactly equal the gains of those on the other.

The equality of profits and losses exists only in the clearing house sense, and not in the sense of describing the total effect of the futures operations on the finances of those trading in the market. This is due to the fact that most traders must pay commissions to have their trades executed. To determine the final outcome of any trader's activity, therefore, it is necessary to deduct commissions from his profits or add them to his losses. The data on profits and losses presented here, however, do not include calculations of commissions.

The complexity of the task of making allowance for commissions and other costs of trading far outweigh the value of the more accurate estimation of the final outcome of trading on the futures market. While such costs may be considerable for the market as a whole, for the individual trader they are almost always of less importance than the financial effects of changes in price.
In the previous section some information was presented on the profits or losses of those traders who were in the market at the end of the survey compared with those who were not. For all trades which were made and closed out during the survey period these figures give the actual outcome of the trading. For positions open at the beginning and at the end of the survey period, however, it was necessary to value the positions held at current prices. For this purpose the official settlement prices on August 31, 1936, and on June 30, 1938, were used. The data presented, therefore, show profits or losses which accrued within the survey period, rather than the final profits or losses on the trading. Since the calculations of profits and losses necessarily include both the buyer and seller in each trade, in comparisons of financial results with amount of trading, "volume of trading" includes both purchases and sales.

It may appear that for the individual trader the most important consideration is the final outcome of all his trading. Before reaching this final outcome, however, he may have experienced both profits and losses of varying amounts. What he gains on his trading in one future he may lose in another. Within the same future he may gain at one time and lose at another. While it does not seem desirable at this point to examine the results of each "trade" ${ }^{19}$ it may be of interest to present profit or loss figures in terms of the outcome of each trader's operations in each future traded. This method of computation gives larger figures of profits and losses for each class of trader than the method used in the preceding section of combining operations of each trader in all futures before securing class summaries. The net difference between profits and losses for each class of trader, of course, is the same in each case. The results of the survey of each trader's operations by individual futures are shown by class of trader in appendix table 39. They show the total outcome of the trading in dollars, rather than the profit or loss in cents per pound. The size of the profit or of the loss, therefore, depends both on the extent of the price change while positions are open and on the size of the position held. No consistent pattern was found. One group of traders does not consistently gain while another group loses.

A summary of profits and losses by class of trader is given in table 15. From this summary it may be seen that both profits and losses were large when trading was large. Top makers, who had the largest volume of trading, had the largest total profits, $\$ 896,630$. Their losses, however, were even larger, amounting to $\$ 1,081,960$. Dealers, who were next in importance in volume traded, had profits of $\$ 595,235$ compared with losses of $\$ 324,565$. The mills, on the other hand, lost $\$ 312,680$ against profits of $\$ 209,430$. The futures commission merchants had profits exceeding their losses by about $\$ 10,000$, while foreign

[^13]traders lost about $\$ 7,000$. It is interesting to note that speculators not connected with the wool trade fared better than the industryconnected speculators, profits exceeding losses by about $\$ 15,000$ in the former case and losses being greater by about $\$ 7,000$ in the latter. The profits of clothing manufacturers exceeded their losses by about $\$ 5,000$, while wool growers had a net addition to income of almost exactly $\$ 1,000$.

Table 15.-Wool top futures: Profits and losses ${ }^{1}$ and volume of trading, Sept. 1, 1936, to June 30, 1938, by type of trader

| Type of trader | Profit | Loss | Volume of trading ${ }^{2}$ |
| :---: | :---: | :---: | :---: |
| ool gro | Dollars $22,840$ | Dollars $21,875$ | $\begin{gathered} 1,000 \mathrm{lb} . \\ 1,140 \end{gathered}$ |
| Dealers | 595, 235 | 324, 565 | 47,390 |
| Top makers. | 896, 630 | 1,081, 960 | 63,365 |
| Mills | 209, 430 | 312, 680 | 22, 970 |
| Clothing manufacturers | 10, 680 | 5, 415 | 1,105 |
| Futures commission merchants | 45, 925 | 35, 665 | 11,430 |
| Industry-connected speculators | 76, 770 | 83, 675 | 10,010 |
| Speculators not related to industry | 42,295 | 27, 155 | 4,835 |
| Foreign traders. | 30,935 | 37, 750 | 2, 665 |
| Total | 1, 930, 740 | 1, 930, 740 | 164, 910 |

1 Computed from net value of each future bought or sold by each trader. This differs from the profits and losses in table 14 which were computed from the net value of all futures combined bought or sold by each trader.
${ }_{2}$ Purchases plus sales.
The above figures cannot be taken as typical of the general results of trading in wool top futures. The survey period was one in which a rise in price of approximately 10 cents per pound during a period when trading was still light was followed by a decline in price of about 36 cents at a time when trading had become much heavier. The average price of the futures traded in on September 1, 1936, the first day of the survey period, was 96.5 cents per pound; the average price of the futures traded on the last day, June 30 , 1938, was 78.3 cents. Because prices were lower at the end than at the beginning it is to be expected that, for the period as a whole, those holding short positions would benefit at the expense of those holding long positions. That this was what happened may be seen from figure 9 and table 16 which summarize by classes of traders the profits and losses of individual traders in all futures combined. The profits made by those whose positions were exclusively or predominantly short were roughly balanced by the losses of those who held long positions.

Figure 9 and table 16 bring out again a fact which was also revealed in table 14. This is that the number of traders with profits was greater than the number with losses. Even more surprising is the discovery that although longs as a group lost heavily there were more longs with profits than with losses. Combining the two groups into which the longs have been classified it is found that 153 longs had profits while 132 longs sustained losses. However, the total profits of the 153 were only $\$ 178,305$, or $\$ 1,165$ per trader. This is in contrast with the losses of the 132 longs who were less fortunate. Their total losses were $\$ 1,039,615$ or $\$ 7,876$ per trader. In view of the price movement during the period covered it is not surprising that the number of shorts with profits was greater than the number with losses. The totals were 84 and 38 , respectively. The losses, however, totaled
only $\$ 130,120$, or $\$ 3,424$ per trader, while the profits amounted to $\$ 987,445$, or $\$ 11,755$ per trader. The average loss of those predominantly long and the average profit of those predominantly short are greatly affected by the figures of individual traders with very large losses on the one hand, and very large profits on the other.

Table 16.-Wool top futures: Net profits and losses ${ }^{1}$ of traders, classified by types of positions held, Sept. 1, 1936, to June 30, 1938

PROFIT

| Type of position | Volume traded ${ }^{2}$ | Traders | Profit or | A verage prost or trader | Average maximum position |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Long | Short |
| Exclusively long | $\begin{gathered} 1,000 \mathrm{lb} . \dot{6} 60 \end{gathered}$ | Number 129 | $\begin{gathered} \text { Dollars } \\ 94,930 \end{gathered}$ | Dollars 736 | 1,000 lb. ${ }_{24}$ | 1,000 lb. |
| Predominantly long | 11,090 | 24 | 83, 375 | 3,474 | 45 | 26 |
| Exclusively short.-.-- Predominantly short | 5, 78, 265 | 34 50 | 60,165 927,280 | 1,770 18,546 | 89 | 44 80 |
| Neither ${ }^{3}$ | 260 | 4 | 575 | 144 |  |  |
| Both ${ }^{4}$ - | 500 | 11 | 5,220 | 475 | 10 | 13 |
| Total. | 103, 650 | 252 | 1,171,545 | 4,649 | 31 | 55 |
| LOSS |  |  |  |  |  |  |
| Exclusively long ${ }^{5}$ | 11,720 | 106 | 475, 030 | 4,481 | 27 |  |
| Predominantly long | 27,345 4 4 895 | ${ }_{23}^{26}$ | 564, 585 | 21, 715 | 82 | 78 |
| Predominantly short 5 | 17,050 | 15 | 78, 495 | 5, 233 | 43 | 147 |
| Neither ${ }^{3}$-------------- | 90 | 2 | , 375 | 188 |  |  |
| Both ${ }^{\text {a }}$ | 160 | 5 | 1,435 | 287 | 6 | 10 |
| Total | 61, 260 | 177 | 1,171,545 | 6,619 | 36 | 75 |

[^14]As indicated above (p.33) the profit and loss calculations involved the valuation of positions at the beginning and end of the survey period at current prices. Because of the small positions at the beginning of the survey period the accrued profits and losses at that time were not large. The much larger total of open contracts at the end of the period resulted in accrued profit and loss figures which were of some importance in the totals. Consequently it seems desirable to present the information on accrued profits and losses on June 30, 1938, in some detail. This is done in table 17. One interesting fact which is revealed is that total accrued losses were greater than total accrued profits. The respective amounts were $\$ 299,160$ and $\$ 153,585$. This fits into the pattern which seems to have characterized the wool top futures market during the survey period. In this pattern there was evident a tendency for the traders to realize their profits when they were small, or moderate, but to allow their losses to accumulate to larger figures. Factors pointing to this conclusion are the smaller number of traders with losses than with profits, the larger average size of losses as compared with profits, and the excess of accrued losses over profits at the end of the survey period.

The data which were presented on the outcome of futures operaations for dealers, top makers, and mills do not necessarily reflect the advantages or disadvantages of the futures market to these
interests. While it may be suspected that some of the trading done by firms engaged in various aspects of the wool industry was speculative, some of the positions taken were undoubtedly hedging operations. The true balance of advantage or disadvantage on these hedging


Figure 9.-Wool top futures: Net profits and losses of traders by types of positions, Sept. 1, 1936, to June 30, 1938. (E. L., exclusively long; P. L., predominantly long; E. S., exclusively short; P. S., predominantly short; O., other.)
operations could be weighed only if the related spot transactions were also considered. In such a consideration weight should be given to the fact that in some instances the spot operation would have been impossible, or so hazardous as to prevent its being undertaken, if hedges could not have been placed in the futures market. It is quite possible for the hedger to sustain large losses on his futures operations but make more than counterbalancing profits from the related spot
transactions. On the other hand, when a trader engaged in spot operations does not automatically hedge his spot commitments, the profit and loss figures on futures trades have a different significance than in cases where a policy of complete hedging is followed. In the former case the decision when to hedge and when not to hedge has to be made. In this half-way house to full hedging the ideal is to hedge only those spot commitments which in themselves would result in losses. Another way of stating this is that such a hedger hopes that all his futures trades will be profitable. This may be most clearly demonstrated by considering the situation of such a trader if all his futures trades were unprofitable. Assuming that over a period of time some of his spot commitments in themselves would be profitable and some unprofitable, and that the price movements of spots and futures are sufficiently similar for adequate hedging, such a hedger would find that profits which otherwise would have been realized on spot operations would be offset by losses on futures, while spot operations which turn out unprofitably are not accompanied by compensating futures trades. This type of hedger's interest in profits on his futures transactions would clearly be similar to that of the speculator.

Table 17.-Wool top futures: Accrued net profits and losses ${ }^{1}$ on positions open as of June 30, 1938
[Based on closing price as of June 30, 1938]

| Type of trader | Long |  |  | Short |  |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\underset{\text { ments }}{\text { Commit- }}$ | Profit | Loss | $\begin{gathered} \text { Commit- } \\ \text { ments } \end{gathered}$ | Profit | Loss | Profit | Loss |
| ool growers | $1,000 \mathrm{lb} .$ | Dollars | Dollars | 1,000 lb . | $\text { Dollars }_{25}$ | Dollars | Dollars | Dollars |
| Dealers | ${ }^{2}$ 2, 720 | 37,250 | 42, 640 | ${ }^{3} 2,790$ | 13,675 | 39,380 | 50,925 | 82,020 |
| Top makers | ${ }^{4} 1,510$ | 21,830 | 117, 420 | 5,385 | 19,265 | 68,790 | 41, 095 | 186, 210 |
| Mills | ${ }^{5} 2,095$ | 16,660 | 5, 685 | 125 |  | 11, 530 | 16, 660 | 17, 215 |
| Clothing manufacturers | 290 | 3,190 | 710 |  |  |  | 3,190 | 710 |
| Futures commission merchants | ${ }^{5} 235$ | 4,955 | 445 | 180 | 13,390 | 660 | 18,345 | 1,105 |
| Industry-connected speculators | ${ }^{2} 705$ | 14,705 | 875 | ${ }^{2} 25$ | 85 | 60 | 14,790 | 935 |
| Speculators not related to industry | ${ }^{2} 610$ | 6,135 | 3,610 | 55 | 565 |  | 6, 700 | 3,610 |
| Foreign traders | 355 | 1,090 | 2, 840 |  |  |  | 1,090 | 2, 840 |
| Total | ${ }^{8} 8,600$ | 106, 580 | 177, 740 | ${ }^{7} 8,600$ | 47,005 | 121, 420 | 153, 585 | 299, 160 |

[^15]
## PROFESSIONAL VS. AMATEUR SPECULATORS

This study of the wool top futures market makes available information which has never before been obtained for any futures market showing the outcome of all trading for 'a considerable period of time. It is true that the market was very small and public participation relatively minor compared with futures markets for wheat and cotton, and that the period covered was not as long as might be desired. Thus qualified, however, the data obtained may be useful in con-
sidering the validity of generalizations which are frequently made as to the outcome of trading on futures markets.

One of the most common of such generalizations is the dictum that the speculators in the market can be divided into two classes; the wolves and the lambs. This view is shared by both opponents and advocates of the futures market. To the opponents the wolves are insiders who decide what prices are to their own advantage and to the disadvantage of outsiders, both those who enter into futures transactions and those who are directly concerned with the commodity as, for example, growers. Advocates of futures markets also frequently picture a group of traders who are well informed, experienced, and skillful. These traders understand market conditions and foresee price movements before they develop. As a result of this foresight they are able to trade in a manner which not only enables the market to perform its economic functions, and prevents unwarranted price movements, but redounds to their own financial betterment.

In view of this widespread belief that a body of successful professional or semiprofessional speculators is to be found trading on futures exchanges, an attempt has been made to see whether such a group was in evidence on the wool top futures market.

It will be recalled that in the classification of wool top futures traders there was a group of accounts which were of a clearly speculative nature. ${ }^{20}$ Undoubtedly some of the trading for the business accounts of firms operating in the wool industry (dealers, top makers, mills, etc.) was also speculative. These trades have not been included in this analysis of speculative activity because it would require an extremely elaborate and exhaustive investigation to discover what part of the trading by these houses was speculative. Furthermore, discussions of the role of the professional speculator usually assume that he acts as the risk bearer who carries the price risks which the business firm operating in the industry must carry if there is no futures market, but gladly transfers when the opportunity is provided. The seeking of price risks through speculative operations in the futures markets by business firms does not fit into this picture.

The first means, therefore, by which an attempt was made to discover whether there was a group of successful professional or semiprofessional speculators in the wool top futures market, was to divide those accounts which were clearly speculative in nature into the personal accounts of persons who were connected with the wool industry and those of persons who were not known to have such connection. It would appear that persons whose business activities brought them into daily contact with the marketing and manufacture of wool would have some, at least, of the characteristics of the professional speculator. In many cases they were persons who in their daily work were greatly concerned with wool prices and market conditions. Sometimes they were persons who had the responsibility of making decisions with regard to spot wool transactions involving hundreds of thousands, or even millions, of pounds of wool. If success in futures speculation is dependent upon inside information many of those were as well placed to secure such information as anyone.

In the previous section it was brought out that speculators who were not connected with the wool industry fared better in their futures activities than those who were. Adding up the figures by

[^16]individual futures it was found that speculators connected with the industry had made profits of $\$ 76,770$ and losses of $\$ 83,675$. In other words, their losses exceeded their profits by approximately $\$ 7,000$. Speculators who were not connected with the industry, on the other hand, had profits of $\$ 42,295$ and losses of $\$ 27,155$, or an excess of profits over losses of over $\$ 15,000$. These figures were obtained by classifying the profits and losses in each future. Therefore, if a trader made a profit in one future and a loss in another, his profit was included in the total profits figures and his loss in the total losses figures. To determine what the outcome of the total trading of the various traders was, the profits and losses in all futures for each trade were combined. On this basis it was found that the total of these net profits for the speculators who were connected with the industry was $\$ 48,130$ while their losses totaled $\$ 55,035$. Corresponding totals for the speculators for whom no evidence of connection with the wool industry could be found were $\$ 36,390$ profits and $\$ 21,250$ losses.

Table 18.-Wool top futures: Speculators classified by profits or losses and whether they were connected with the wool industry


[^17]In connection with the above data the question might be raised whether the balance of losses for the more professional group was caused by a few very unfortunate-and possibly less skillful-traders who had large losses, while the great bulk of the group made profits which were consistent, if smaller in total amount. Similarly the balance of profits for the other group might be due to one or two very lucky plungers who made profits of such magnitude as to completely obscure the fact that the great majority of these outsiders lost money on their trading. A count of the number of each class of speculators making profits and the number suffering losses indicates that the actual situation was quite otherwise. (See table 18.) It is true that among those connected with the industry a small majority made profits, 29 to 23 . This difference, however, can hardly be considered of much significance, especially if a rough adjustment is made for commission costs the result of which is to give 27 traders with profits against 25 traders with losses. By contrast the traders who were not connected with the industry included 80 who made profits as compared with 46 who suffered losses. When the adjustment for commission costs is made, the totals are 72 and 55. Certainly there is no evidence here that those who were connected with the industry were more successful in their speculation than those who did not have the advantage of such connection.

It may be that the fact that a person is or is not connected with the industry is not a good basis upon which to separate those who may be considered professional speculators from those who may not. Perhaps


Figure 10.-Wool top futures: Average profit or loss and number of contracts traded by speculators, Sept. 1, 1936, to June 30, 1938.
a better test is to compute the profits or losses per pound on the trading done, and see whether there is a group of persons who are found in the market over a considerable period of time who tend to make fairly good profits per pound of wool top futures traded. Figure 10 makes it possible to explore this possibility. On it each trader is indicated
at a position which represents the profit or loss in cents per pound on his trading and the number of futures in which he traded during the survey period. Two and a half cents per pound may be taken as representing a fairly good profit. It amounts to approximately 4 times the nonmember commission rate, and more than half of the traders classified in the 2 speculative classes made profits or losses of less than this amount. It is not surprising that 26 traders making losses of this amount or more traded in only 1 future. It is surprising, however, that an even larger number, 32, with profits of $2 \frac{1}{2}$ cents or more should not have traded in more than 1 future. Apparently a number of traders who made good profits on their first experience in the market during the survey period were willing to retire and rest on their laurels. In this connection it should be pointed out that these results are influenced somewhat by the fact that some of the traders made their first trades near the end of the survey period, and the fact that they traded in only one future does not mean that their experience as traders in wool top futures has ended; it may have just begun. Even with this qualification it is clear that there was a striking tendency for individuals to stop their futures trading activities after one successful venture.

It may be seen from figure 10 that none of the speculative traders who operated in more than 3 futures made a profit of as much as $21 / 2$ cents per pound. It appears that it was in this instance difficult to stay in the market over an extended period and make sizable profits. There were, however, 13 traders, 8 of them connected with the industry and 5 not, who traded in more than 3 futures and made profits. Perhaps they are the inner group which may be considered the professional speculators. An examination was made of their individual trading experiences to see if they were consistently profitable. It was found that with one exception these accounts did record profits in the majority of the futures traded. The one exception suffered losses on 5 out of 8 futures traded, but made a profit on 1 future large enough to cancel almost exactly the losses on the other futures. It was also discovered that 6 of the 13 accounts were the accounts of partners or close relatives of partners of 2 top makers whose activities played a dominant role in trading in wool top futures. These activities are discussed in a subsequent section, Concentration of Trading.

Another, closely related, test of the professional speculator is the scale of his trading. The professional may or may not have a large position at any one time, but it is to be expected that his persistent interest in the market will result in a considerable volume of trading. In figure 11 the profits and losses in cents per pound of the members of the two groups of speculators have been compared with the volume of trading done. The picture is quite similar to that shown on the previous chart. There were only 8 traders who made appreciable profits and whose total operations amounted to 100,000 pounds or more. All but 2 of these were included in the 13 cases discussed above. One of the two not included traded in 2 futures, losing on one and gaining on the other. The second made profits on all 3 of the futures traded.

The group of traders who, during the survey period, appeared to fit the specifications of professional speculators was very small indeed. Their total trading amounted to less than 1 percent of all trading in wool top futures during the survey period. It is clear that during this
time (and subject to the qualifications mentioned earlier concerning the business accounts of firms in the wool industry) there was no body of professional speculators in the market trading in quantities sufficient


Figure 11.-Wool top futures: Average profit or loss and total volume of trading by speculators, Sept. 1, 1936, to June 30, 1938.
to have an appreciable effect on prices. The wool top futures market was relatively very small, however, and the situation may be quite different for larger markets and markets with large public participation.

## FOREIGN TRADERS IN THE AMERICAN MARKET AND AMERICAN TRADERS IN FOREIGN MARKETS

F. During the period of the survey not only did Americans engage in trading in wool top futures in foreign markets, but foreign traders took some interest in the New York Wool Top Exchange. The amount of this trading by foreigners, however, has been relatively unimportant. It has already been shown that on August 31, 1936, there were four foreign traders in the market with long commitments equal to about 5 percent of total long commitments and short positions equal to less than 1 percent of total short commitments. By the end of the survey period the number of foreign traders was still only six. They had no short commitments in the New York market, and on the long side they held about 4 percent of total commitments. During the survey they bought on the futures market 1,475,000 pounds and sold $1,190,000$ pounds. Altogether this accounted for only 1.6 percent of all trading during the survey period.

Data for foreign trading on the New York exchange since June 1938 have not been obtained. No evidence has been found, however, to indicate that there was any significant change in the relative importance of foreign trading up to the outbreak of war in September 1939. There is reason to believe that because of war conditions and the accompanying foreign exchange and other restrictions since that date foreign trading has declined to negligible proportions.

While the European markets for wool top futures were still in operation an important amount of the trading on them originated in this country. Information as to the extent of such trading first became available on September 15, 1938. On that date the Commodity Exchange Administration began to receive daily reports on positions and trading from all persons having a position of 125,000 pounds or more of wool tops in any one future on the New York exchange. These reports showed positions and trading in foreign markets as well as at New York. Monthly totals of the volume of trading so reported in the two foreign markets, Antwerp and RoubaixTourcoing, are shown in table 19 from September 15, 1938, to September 13, 1939, by which date all the reporting traders had liquidated their positions in the foreign markets. The foreign markets had been closed during the first week of September 1939 because of war conditions.

The purchases by reporting traders on foreign markets during this 12 -month period amounted to $14,269,000$ pounds and their sales to $11,823,000$ pounds. Since total trading on these exchanges for the same period was $149,397,000$ pounds, large American traders accounted for almost 9 percent of the volume of these European markets. This foreign trading by Americans was equal to 13.1 percent of the total volume of trading by all traders on the New York exchange during the same period. In addition some trading on these foreign markets was undoubtedly done by American traders who were not in reporting status. The reporting traders, however, accounted for approximately 60 percent of all trading on the New York exchange, and it is probable that they accounted for substantially more than 60 percent of the total American trading on the foreign exchanges. It will be noted that American trading on the Antwerp exchange was far greater than
at Roubaix-Tourcoing. In fact, more than 95 percent of the reported trading on foreign markets took place on the Antwerp exchange.

Table 19.-Antwerp and Roubaix-Tourcoing wool top exchanges: Volume of trading by reporting traders, by months, Sept. 15, 1938, to Sept. 13, 1939
[In thousands of pounds]

| Year and month | Antwerp |  | Roubaix-Tourcoing |  | Total foreign |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Bought | Sold | Bought | Sold | Bought | Sold |
| 1938 |  |  |  |  |  |  |
| September | 405 | 615 | 66 |  | 471 | 615 |
| November. | 445 | 400 | 165 | 165 | 610 | 565 |
| December | 385 | 1,510 | -- |  | 385 | + 310 |
| 1939 |  |  |  |  |  |  |
| January | 1, 150 | 1,340 | 46 |  | 1,196 | 1,340 |
| February | 775 | 855 | 71 |  | 846 | 855 |
| March. | 380 | 440 | 138 | 28 | 518 | 468 |
| April | 1, 460 | 1,365 |  | 35 | 1,460 | 1,400 |
| May | 745 | 880 | -- | 55 | 745 | , 935 |
| June | 840 | 1,115 |  |  | 840 | 1,115 |
| July | 860 | 895 |  |  | $\delta 60$ | 895 |
| August | 1,385 | 1,150 | 66 | 55 | 1,451 | 1,205 |
| September | 4, 170 | 530 | 44 |  | 4, 214 | 530 |
| Total | 13,645 | 11,485 | 624 | 338 | 14, 269 | 11,823 |

The relative importance of foreign and domestic trading in wool tops by American traders is probably shown more clearly and more adequately by a comparison of the commitments of reporting traders in the foreign markets and in New York. This comparison is shown by months in table 20. The commitments are classified as speculative, hedging, and straddling. In both foreign and domestic markets the bulk of the commitments is reported as hedging, but this predominance of hedging is especially striking in the figures of commitments in the foreign markets. These hedges, which were predominantly short, were undoubtedly largely against stocks of American wool, although from time to time foreign wools purchased for importation would be hedged abroad. Long hedging positions in foreign markets were quite small, averaging less than one-tenth as large as short hedging positions. No short speculative or straddling positions were reported for foreign markets.

It will be noted that the short positions in the foreign markets, all classified as hedging, are surprisingly large, especially in comparison with the commitments of the same traders in the domestic market. Over the 12 -month period for which comparable figures are available the average short commitments of these traders were $5,207,000$ pounds on the New York exchange compared with $3,986,000$ pounds on the foreign exchanges. During the months of March, June, and July 1939 their short commitments abroad actually exceeded their short commitments in the domestic market. Their average long commitments in foreign markets were 489,000 pounds compared with $3,146,000$ pounds in New York. In other words, 13.5 percent of the daily average long commitments of the reporting traders in all markets, and 43.4 percent of their average total short commitments, were held on the foreign exchanges.

Table 20．－Wool top futures：Average daily total commitments of reporting traders in domestic and foreign markets，October 1938 to December 1939
［In thousands of pounds］

| Year and month | Total commitments in domestic markets reported as－ |  |  |  |  |  |  |  | Total commitments in foreign markets reported as－ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Specula－ tive |  | Hedging |  | Strad－ dling |  | Total |  | Spccu－ lative |  | Hedging |  | Strad－ dling |  | Total |  |
|  | $\begin{aligned} & \text { E0 } \\ & \text { H } \end{aligned}$ |  | $\begin{aligned} & \text { ÊE } \\ & \text { A } \end{aligned}$ |  | $\begin{aligned} & \infty 0 \\ & \text { E } \\ & \hline \end{aligned}$ | 起 | $\begin{aligned} & \text { 若 } \\ & \text { in } \end{aligned}$ | $\underset{\sim}{ \pm}$ | $\begin{aligned} & 60 \\ & \text { E } \\ & \text { H } \end{aligned}$ |  | $\begin{aligned} & \infty \\ & \text { I } \\ & \text { H } \end{aligned}$ | ＋ | bo | 荌 | ＊ | ＋ |
| 1938 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| October | 695 | 427 | 1，207 | 5， 309 | 107 | 107 | 2， 009 | 5， 843 |  |  |  | 2， 569 |  |  | 40 | 2，569 |
| November | 955 | 499 | 1，714 | 5， 113 | 140 |  | 2， 809 | 5， 752 |  |  |  | 3， 027 |  |  | 121 | 3， 027 |
| December | 1， 045 | 463 | 2，217 | 4，977 | 29 | 29 | 3， 291 | 5，469 | 27 |  |  | 3， 625 |  |  | 159 | 3， 625 |
| 1939 |  | 14 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Februar | 972 782 | 144 | 2， 2011 | 5， 236 | 3 |  | 3， 197 | 5， 380 4,582 | 50 |  | 422 | 3， 846 | 3 |  |  | 3,846 4,223 |
| March | 702 |  | 2，152 | 3， 935 | 24 | 30 | 2， 878 | 3， 965 | 13 |  | 627 | 4， 184 | 6 |  |  | 4，184 |
| April | 1，247 | 3 | 2， 136 | 4， 636 | 16 |  | 3， 399 | 4，737 | 57 |  |  | 4， 143 | 82 |  |  | 4，143 |
| May | 991 | 1 | 2， 093 | 4，556 | 55 |  | 3， 139 | 4，814 | 6 |  | 379 | 4，150 | 202 |  | 587 | 4，150 |
| June | 691 | 1 | 2， 129 | 3， 927 | 105 | 310 | 2， 925 | 4，238 | 25 |  | 442 | 4， 648 | 205 |  | 672 | 4，648 |
| July | 572 | － | 2， 684 | 4， 381 | 153 |  | 3， 409 | 4， 742 | 25 |  | 422 | 4， 808 | 208 |  | 655 | 4，808 |
| August | 552 |  | 3， 119 | 4，811 | 210 | 409 | 3， 881 | 5， 220 | 25 |  | 435 | 4，744 | 200 |  | 660 | 4，744 |
| September | 830 | 19 | 2，981 | 7， 399 | 305 | 321 | 4， 116 | 7， 739 | 25 |  | 330 | 4， 034 | 200 |  | 555 | 4，034 |
| October | 1， 104 | 18 | 2， 933 | 8， 761 | 327 |  | 4， 364 | 9，106 |  |  |  |  |  |  |  |  |
| November | 1，285 |  | 2， 519 | 9， 808 | 165 | 165 | 3， 969 | 9，974 |  |  |  |  |  |  |  |  |
| December | 1，174 |  | 2， 502 | 11， 731 | 106 | 106 | 3， 782 | 11， 837 |  |  |  |  |  |  |  |  |
| Average ${ }^{2}$ | 907 | 105 | 2， 301 | 5， 924 | 116 | 177 | 3， 324 | 6， 206 | 24 |  | 383 | 3， 986 | 82 |  | 489 | 3，986 |
| A verage for 12 months October 1938－Sep－ tember 1939 | 838 | 130 | 2， 213 | 4，907 | 95 | 170 | 3， 146 | 5，207 | 24 |  | 383 | 3， 986 | 82 |  | 489 | 3，986 |

[^18]
## CONCENTRATION OF TRADING AND COMMITMENTS

From information presented earlier in this report it is clear that a small number of traders accounted for a large part of the activity on the wool top futures market．The extent of this concentration is indicated by the fact that 10 traders，constituting between 2 and 3 percent only of the total number of traders，did more than half the trading in wool top futures during the survey period．The distri－ bution of traders by scale of trading is set forth more fully in table 21 and figure 12．Some traders had positions on September 1，1936， which were liquidated during the survey period，and other traders acquired during the survey period positions which were still held at the end．Consequently，purchases and sales are not neces－ sarily equal for an individual trader nor for a group，and，as in the section on profits and losses，it is more convenient to measure scale of trading in terms of purchases plus sales than in terms of either pur－ chases or sales alone．Trading activity has a broader meaning， therefore，in table 21 and figure 12 than in the usual practice in which volume of trading is given for＂one side only．＂

From table 21 it will be observed that for 97 traders the total activity of each during the survey period amounted to only 5，000 or 10,000 pounds．Those who traded only 5,000 pounds either liqui－ dated or initiated a single contract during the survey period．Those who traded 10,000 pounds may have bought and sold 1 contract or
they may have liquidated or initiated 2 contracts. These 97 traders numbered more than one-fifth of all traders who participated in the wool top futures market during the period, but their trading amounted to a minute proportion of the total, approximately one-half of 1 percent. At the other extreme are 57 traders who each traded to a total


Figure 12.-Wool top futures: Distribution of traders by volume traded Sept. 1, 1936, to June 30, 1938.
of more than 500,000 pounds (purchases plus sales). In numbers they were 13 percent, but their trading accounted for more than 82 percent of the total volume.

Table 21.-Wool top futures: Distribution of traders by volume traded, Sept. 1, 1936, to June 30, 1938

| Volume per trader ( 1,000 pounds) ${ }^{1}$ | Traders | Total volume traded ${ }^{1}$ | Volume per trader (1,000 pounds) ${ }^{1}$ | Traders | Total volume traded ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{array}{r} \text { Number } \\ 97 \\ 69 \\ 70 \\ 50 \\ 45 \end{array}$ | $\begin{array}{r} 1,000 \mathrm{lb} . \\ 835 \\ 1,335 \\ 2,530 \\ 3,920 \\ 6,435 \end{array}$ | $\begin{array}{r} 205-500 \\ 505-30,325- \\ \text { Total } \end{array}$ | Number $\begin{array}{r}43 \\ 57 \\ \hline\end{array}$ | $\begin{array}{r} 1,000 \mathrm{lb} . \\ 14,460 \\ 135,395 \end{array}$ |
|  |  |  |  | 431 | 164,910 |

${ }^{1}$ Purchases plus sales.
Concentration may mean something more than a comparison of the relative total amounts traded by fairly large groups of traders at the two extremes. It is to be expected that any concentration of trading great enough to affect the market seriously by subjecting it to control, or by impairing the effectiveness of competition would ordinarily involve fewer traders than the 57 who are included in the group trading over 500,000 pounds. From this point of view the degree of concentration may be indicated by the answers to questions such as, "What proportion of total trading was done by the largest 3 traders? by the largest 6?" For wool top futures from September 1, 1936, to

June 30, 1938, the answers would be that the largest 3 traders combined did 31.9 percent of the trading, while the largest 6 accounted for 42.4 percent of all trades. In these terms it appears that there was considerable concentration of trading on the wool top futures market during the survey period.

Unfortunately detailed studies of trading comparable to the wool top survey have not been made for other markets, and comprehensive figures for the percentage of trading done by the largest traders on these other markets are not available. It is, therefore, impossible to say definitely whether the percentages mentioned above are high or low compared with other futures markets. If commitments rather than volume of trading, however, are used as an indication of degree of concentration it is possible to compare wool tops with other commodities. From the reports made to the Commodity Exchange Administration by traders holding large positions, the percentages of long and short commitments held on the principal exchanges by the largest 3 traders in each commodity on each of 10 quarterly dates have been determined. These percentages are shown from October 1, 1937, to January 2, 1940, in figures 13 and 14, and table 22.

Table 22.-Percentage of futures commitments in selected commodities held by largest 3 traders in each commodity on 10 quarterly dates, Oct. 1, 1937, to Jan. 2, 1940

| Date | Wool tops ${ }^{1}$ |  | Cotton ${ }^{2}$ |  | Wheat ${ }^{3}$ |  | Corn ${ }^{3}$ |  | Butter ${ }^{4}$ |  | Eggs ${ }^{\text {4 }}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | - | $\begin{gathered} \stackrel{\rightharpoonup}{\pi} \\ \frac{\pi}{\omega} \end{gathered}$ | E00 | $\begin{gathered} \stackrel{\rightharpoonup}{\pi} \\ \stackrel{y}{3} \\ \vec{\omega} \end{gathered}$ | $\begin{aligned} & \text { E0 } \\ & \text { O } \end{aligned}$ | $\begin{gathered} \stackrel{\rightharpoonup}{u} \\ \frac{1}{6} \\ \hline \end{gathered}$ | -60 | $\stackrel{\rightharpoonup}{2}$ | -80 | + | - | 艺 |
| Oct. 1, 1937 | 62.5 | 60.0 | 7.3 | 43.6 | 4.7 | 25.4 | 9.1 | 28.6 | ${ }^{5} 5.3$ | 43.9 | 9.0 | 42.0 |
| Jan. 3, 1938 | 64.8 | 43.2 | 4.7 | 43.4 | 4.1 | 23.8 | 29.9 | 25.6 | 14.6 | 38.1 | ${ }^{6}$ ) | ${ }^{7} 5.9$ |
| Apr. 1, 1938 | 37.0 | 41.1 | 4.5 | 42.9 | 6.0 | 26.2 | 34.8 | 20.5 | 8511.0 | 878.2 | 17.6 | 48.6 |
| July 1, 1938 | ${ }^{9} 20.1$ | ${ }^{9} 56.0$ | 6.4 | 42.9 | 7.4 | 12.9 | 50.6 | 27.2 | 18.4 | 45.5 | 10.2 | 41.5 |
| Oct. 1, 1938 | 17.1 | 57.4 | 5.4 | 36.0 | 3. 6 | 18.7 | 37.6 | 33.7 | 24.9 | 41.2 | 26.9 | 47.5 |
| Jan. 3, 1939 | 26.4 | 48.2 | 8.3 | 35.1 | 4.1 | 20.6 | 21.1 | 33.7 | 10722.2 | $\left.{ }^{6}\right)$ | ${ }^{7} 4.4$ | 20.5 |
| Apr. 1, 1939 | 30.3 | 40.7 | 6.8 | 28.6 | 4.9 | 20.8 | 20.5 | 37.8 | ${ }^{7} 23.3$ | (6) | 11.0 | 27.4 |
| July 1, 1939 | ${ }^{11} 25.0$ | ${ }^{11} 36.5$ | 20.0 | 30.0 | 6.1 | 29.3 | 22.5 | 41.0 | 1220.3 | 1249.5 | 1211.2 | 1234.1 |
| Oct. 2, 1939 | 22.1 | 45.5 | 30.3 | 29.5 | 7. 0 | 17.2 | 35.9 | 38.5 | 19.2 | 48.5 | 6.0 | 41.0 |
| Jan. 2, 1940 | 10. 5 | 45.9 | 29.4 | 27.0 | 6.2 | 17.6 | 21.7 | 37.9 | 15.2 | 54.7 | 9.1 | 33.3 |

1 New York Wool Top Exchange.
2 New York Cotton Exchange.
${ }^{3}$ Chicago Board of Trade.
${ }^{4}$ Chicago Mercantile Exchange.
52 traders.
${ }^{6}$ Information not available.
${ }^{7} 1$ trader.
8 As of April 25.
${ }^{9}$ As of June 30.
${ }^{10}$ As of March 11.
${ }^{11}$ As of July 3
${ }^{12}$ As of July 5 .

In addition to the information on wool tops, data are shown for cotton on the New York Cotton Exchange and for wheat and corn on the Chicago Board of Trade. Information for butter and egg futures on the Chicago Mercantile Exchange is shown in table 22 but is not presented in the charts because on a number of dates chosen even the largest traders did not have commitments in one or the other of these commodities sufficient to require them to report, and variations in the proportions of butter and egg futures commitments held by the largest traders were so great that their inclusion would obscure the situation for the other commodities.

Figure 13 reflects the concentration in holdings of long futures commitments in the four commodities, wool tops, cotton, wheat, and corn. It is immediately apparent from it that there are striking
changes from one time to another in the proportions of total long holdings of wool top futures in the hands of the largest three longs. On January 3, 1938, for example, the largest three longs combined


Figure 13.-Percentage of long commitments in selected commodities held by largest 3 longs in each commodity on 10 quarterly dates, Oct. 1, 1937, to Jan. 2, 1940.
held almost 65 percent of all long commitments, but on January 2, 1940, the largest three held between 10 and 11 percent of long commitments. Only slightly less striking is the contrast in the proportions held by the largest three longs in corn futures on October 1,

1937, and on July 1, 1938. Other commodities show less extreme but still substantial variations.

From the data shown in figure 13 and table 22 it may be concluded that during the period covered there was greater concentration in long holdings for wool tops than for any other commodity considered. This greater concentration, however, was pronounced only on the first 2 dates for which comparisons are made, and for 4 of the 10 dates there was greater concentration of long commitments for at least 1 other commodity. The comparison of percentages of short holdings presented in figure 14 indicates that the concentration on the short side of the market is generally greater than on the long side. Wool tops again exhibit the greatest degree of concentration, but on 2 dates were exceeded by cotton and on one by corn. On both the long and short sides of the market wheat futures showed the least concentration.

In determining the degree of concentration the composition of the market was examined for each of the 10 quarterly dates shown in table 22. It frequently happened, therefore, that the 3 traders who were included among those with the largest positions at 1 date would not be among those with the largest positions at another date. An important distinction may be drawn between a market in which a small number of traders consistently hold outstanding positions and one in which the identity of those holding predominant positions changes frequently.

In cotton, for example, 12 different traders had positions which qualified them for inclusion in the largest 3 longs on at least 1 of the 10 quarterly dates. Only 4 different traders, however, were included among the largest 3 shorts on the same dates. This contrast indicates that the concentration on the short side was much more persistent than that on the long side. The 2 traders who appeared among the largest 3 shorts most frequently were also among the largest 3 longs as often or more often than any other trader. In other words, there was a very high degree of concentration of positions in cotton futures, both long and short, in the hands of 2 traders. On the short side only 2 other traders held outstanding positions on the selected dates, but on the long side 10 other traders at some time were included in the largest 3 traders.

In wool tops 9 traders shared the distinction of being among the largest 3 shorts on at least 1 of the 10 quarterly dates as compared with 13 traders who at some time were among the largest 3 longs. The 2 traders most frequently among the ranking longs were also among the leading 3 shorts as often or more often than any other trader.

The different markets are compared in table 23 with respect to the number of traders who on at least 1 of the 10 quarterly dates were included among the largest 3 holders of commitments.

In some of the markets the same trader was among the largest 3 on each of the 10 dates for which comparisons were made. There were other traders who were in the group of the largest 3 on only 1 occasion. For each commodity the number of times each trader was among the largest 3 was determined, and the number of such occasions for the traders who ranked first, second, and third in this respect is shown in table 24.

In the wool top futures market 1 trader was among the largest 3 longs 6 times. The trader who appeared next most frequently was
included 4 times and the trader who was third in order was included 3 times. On the short side, 1 trader was included among the largest 3 shorts on each of the 10 dates. The trader who was second in


Figure 14.-Percentage of short commitments in selected commodities held by largest 3 shorts in each commodity on 10 quarterly dates, Oct. 1, 1937, to Jan. 2, 1940.
frequency of appearance was included 4 times and the trader who was third 3 times. A rough indication of the degree of persistency in concentration is found in the totals of the frequencies. For example, the frequencies for the long side for wool tops total 13 while for short
commitments the total is 17 . It will be noted that for each of the commodities there was greater persistence in the concentration on the short than on the long side. The maximum figure which the total frequencies could reach is 30 . The greatest uniformity was found for the short cotton commitments where the total frequency was 29 . This represented a situation in which 2 traders were among the largest 3 on each of the dates selected and a third trader was included on 9 of the 10 dates.

Table 23.-Number of traders in New York and Chicago markets who on at least 1 of the 10 quarterly dates were included among the largest 3 holders of commitments


Table 24.-Number of times particular traders appeared among the largest 3 holders of commitments in selected commodities on 10 quarterly dates, Oct. 1, 1937, to Jan. 2, 1940

| Commodity | Rank in terms of number of times traders were included in largest 3 |  |  |  |  |  | Instances accounted for- |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | First |  | Second |  | Third |  | By first 3 |  | By lower ranks |  | Total |  |
|  | Long | Short | Long | Short | Long | Short | Long | Short | Long | Short | Long | Short |
| Wool tops | 6 | 10 | 4 | 4 | 3 | 3 | 13 | 17 | 17 | 13 | 30 | 30 |
| Cotton | 7 | 10 | 4 | 10 | 4 | 9 | 15 | 29 | 15 | 1 | 30 | 30 |
| Wheat.- | 5 | 8 | 4 | 6 | 3 | 5 | 12 | 19 | 18 | 11 | 30 | 30 |
| Corn-- | 9 | 7 | 5 | 7 | 3 | 5 | 17 | 19 | 13 | 11 | , 30 | 30 |
| Butter | 6 | 7 | 4 | ${ }_{6}$ | 2 | 3 | 12 | 16 | 12 | 6 | ${ }^{1} 24$ | ${ }_{1}^{122}$ |
| Eggs--- | 3 | 7 | 2 | 6 | 2 | 6 | 7 | 19 | 18 | 9 | ${ }^{1} 25$ | ${ }^{1} 28$ |

${ }^{1}$ Because the largest traders failed to reach the reporting lim it in butter and in eggs on several occasions, information on the largest traders in these 2 commodies is not available for a number of the quarterly dates.

From this analysis it may be concluded that for the period covered there was a considerable degree of concentration in holdings of wool top futures. This concentration, however, was comparable with that found in some other futures markets in degree and no more striking than in some other cases in persistence. This is particularly true when a comparison is made with the cotton futures market.

There is a further aspect of wool top futures trading for which the degree of concentration may be examined. This is the delivery process. On a futures market delivery plays a very significant role. The amount actually delivered may be relatively small, but it constitutes the real connection between the futures and the spot markets. The expectations of traders as to quantities and qualities likely to be delivered are influential in their decisions to trade or not to trade and at what prices. During the delivery month heavy deliveries on the one hand or difficulties in delivery on the other may have important effects on prices and on the operations of traders in futures. For
these reasons the concentration of the delivert process in the hands of a few persons or firms may result in a considerable degree of control orer the market.

In riew of the fact that the futures contract calls for delirers of wool tops it is not surprising that practically all the deliveries during the surver period were made by top makers. To a very large extent the acceptors of these deliveries were also top makers. Consequently this most important function was largely in the hands of only one of the groups using the market-a group also which is numerically quite small.
Eren among the top makers participation in deliveries on futures contracts has been limited almost entirely to two firms. The data presented here relate to three rather than two firms in order to aroid disclosure of the operations of a single firm. Howerer, the operations of the third firm were relatively unimportant.
During the surver period deliveries on futures contracts amounted to $4,100,000$ pounds of wool tops. Of this amount $3.940,000$ pounds or 96 percent was delivered by three top makers. The same three firms took delivery on $3,520,000$ pounds or approximately 86 percent of the wool tops delivered on futures contracts during the surrey period. Considering the small volume of the third top maker, it is obrious that to a large extent the delivery process consisted of the transferring of wool tops from one of two top makers to the other.

Since the concentration of futures commitments in cotton was also great it mar be of interest to examine the situation with respect to deliveries of cotton. Data are not available for the whole period corered br the wool top surrer, but other eridence indicates that participation in deliveries of cotton has not changed greatly in the last few rears. During the crop year 1938-39 three firms made 76 percent of all deliveries of cotton, and three firms received 67 percent of all cotton delivered on the New York Cotton Exchange. The distribution among the three firms was more even than in the case of wool tops. Two cotton merchants were among the largest three with respect to both making and taking deliveries. The concentration of the deliver process in the cotton futures market, therefore, while appreciable does not seem to be as great as in wool top futures.
In summary it may be said that it is in the delirery process that the highest degree of concentration is found on the wool top futures market. It accompanies, howerer. considerable, but not unprecedented. concentration of commitments and-as will be shown in a later sectionappreciable centralization of the futures commission business in the same hands.

## TRADING BY EXCHANGE MEMBERS

Membership in a futures exchange is of ralue because it carries the right to trade on the exchange either for the member's own account or for the account of a customer. or to hare such trades executed at reduced, or members' rates. Because of its relation to the New York Cotton Exchange, there are unusual features connected with membership privileges on the wool top exchange. Full privileges are granted only to members of the New York Cotton Exchange. who are known as class A members of the wool top exchange. Clearing of wool top futures is done br the New York Cotton Exchange Clearing Association, Inc., the membership of which is drawn exclusirely from
the membership of the cotton exchange, that is, class A members of the wool top exchange. Class B members are given the advantage of membership rates on wool top futures transactions but may not themselves execute trades on the floor of the exchange nor clear futures transactions.

At the time the wool top exchange was started the membership consisted almost exclusively of members of the cotton exchange. The interest of most of these members in wool top futures was in executing orders in these futures for customers. From the very beginning one top maker had class A membership representation and during the survey period another top maker was also represented by a class A member. The initial interest of their firms in the exchange may have been in making and clearing their own trades, or having them made at members' rates. However, both also engaged in the futures commission business, and their memberships were therefore also of value in enabling them to earn commissions on trades made and cleared for customers.

The futures commission merchant accepts orders from members and nonmembers for execution on the exchange. He maintains records of each customer's transactions and ordinarily requires his customers to make deposits of margins to guarantee performance under the commitments made. If he has full membership privileges he may execute the trade on the floor of the exchange, and clear the transaction. Frequently, however, the trade will actually be executed by a floor broker. If he is not a clearing member the transactions to which he is a party must be cleared through a member of the clearing association. The clearing member in such a case keeps records and requires margins of the futures commission merchant in the same way that the latter does with respect to his customers.

An examination of the membership status of those trading on the wool top futures exchange during the survey period gives some indication of the considerations which influenced those becoming members. The total volume of trading, one side only, from September 1, 1936, to June 30, 1938, was $82,455,000$ pounds including deliveries. In the classification of trading given in table 25 according to the membership status of traders, trades for house accounts of firms having member representation, and trades of their partners, executive officers, and subsidiaries have been combined with the trades of the member partner or partners.

Table 25.-Wool top futures: Classification of traders and volume traded, Sept. 1, 1936, to June 30, 1938

| Classification | Traders | Volume traded |
| :---: | :---: | :---: |
| Class A members | Number | $1,000 \mathrm{lb} .$ |
| Class B members. | 50 | 34, 740 |
| Nonmembers.. | 333 | 17,485 |
| Total | 406 | 82,455 |

The total number of traders is smaller than the number shown in tables $10,11,13,14,16$, and 21 because of the combination of accounts explained above. Three firms which had, directly or indirectly, class A and class B membership representation simultaneously during all or
part of the survey period are included only in the classification "Class A members."

For a small group of traders with class A membership representation, reduction of commission charges was an important consideration in the advantages of membership. The difference between member and nonmember rates on the trading done by these traders for their own account or accounts of closely connected individuals, firms or subsidiaries was $\$ 90,690$. While 23 traders with class A membership representation traded for themselves or their related interests during the survey period, over 85 percent of this trading was accounted for by 2 top makers and their subsidiaries and partners. Membership was valuable to these 2 top makers in their own trading and also in connection with their important futures commission and clearing business.

The 23 traders with class A memberships included only 6 whose sole trading was for the account of the firm or its partners and the total amount traded by these 6 was only 305,000 pounds. There were 9 floor brokers whose trading for themselves amounted to 955,000 pounds, but who executed an undetermined total volume of trades for others. The remaining 8 firms who had class A membership representation played an important part in trading. Their trades for themselves or related interests totaled $28,970,000$ pounds, which was more than 35 percent of all trading during the survey period. In addition these 8 firms made trades of $5,790,000$ pounds for nonaffiliated non-member customers. These $8^{21}$ firms included 6 houses engaged in the security or commodity futures brokerage business and 2 top makers. The 2 top makers dominated the activities of the group in wool top futures trading. More than 90 percent of the trading of this group of 8 was done by these 2 . This was true both of trading for customers and of trading for their own account.

There were only 65 class B members at the end of the survey period on June 30, 1938, and during the survey period $50{ }^{22}$ firms with class B membership representation traded for themselves or affiliated interests. It is apparent that the saving on commission charges on their own trades was an important item to most of those who were B members during the survey period. At nonmember rates the commissions on futures trades aggregating $34,740,000$ pounds would have been $\$ 208,440$ while at members' rates they would have been only half this figure. Among the firms with class B membership representation there were 43 who traded only for themselves or related interests. There were 7 whose trades for themselves or affiliated interests amounted to $10,295,000$ pounds, and who had customers whose trading totaled $2,100,000$ pounds. Only 3 firms were considered to have traded for customers only, the total volume of such trading being $1,280,000$ pounds. Two of these were foreign commission houses. The identities of the customers of these foreign houses were not ascertained, but it was assumed that all their trading was for customers.

Although nonmembers outnumbered members, as classified in table 25, nearly 5 to 1 during the survey period, their total trading aggregated only slightly more than one-quarter as much as that of members. On this nonmember business, members earned full commissions. The possibility of making these commissions and the half

[^19]commissions on members' trades, and the opportunity of earning the fees going to floor brokers for executing trades or to clearing members for clearing trades, are also important advantages of membership. Because a number of different parties may participate in the handling of each trade it is extremely difficult to determine just what roles are played by the different groups engaged in accepting orders, carrying accounts, executing and clearing trades. While it is not feasible to unravel completely the complex relationships involved, an attempt is made in the next section to present the outstanding features of the commission merchant business in wool top futures during the survey period.

## FUTURES COMMISSION AND CLEARING OPERATIONS

An extended discussion would be required to trace out all the complex interrelationships involved in the processes of accepting, transmitting, and executing orders for wool top futures, carrying accounts, and clearing trades. Such a discussion would expand this report unduly. Instead, a general picture will be presented showing some of the main relationships discovered.

During the survey period from September 1, 1936, to June 30, 1938, 112 futures commission merchants participated in the wool top futures business. Some of them participated actively and continuously during the whole period. Others were only slightly and briefly concerned with wool top futures. This group comprised 73 individuals or firms with class A membership representation and 39 nonmembers. There were also 9 fioor brokers who were class A members, but who by exchange rule could not have customers. In addition to the 112 futures commission merchants there were 53 individuals or firms with class B membership representation who under the exchange rules could accept orders from customers. Only 10 of them actually handled orders for nonaffiliated customers. As most of these class B members were engaged in the wool trade and were not brokerage houses with a public clientele, the term "futures commission merchant" may be applied to them only in the very broad sense that they could or did accept orders from customers. The extent of participation in the wool top futures market by the various groups is shown in table 26.

Since all trades must be cleared ${ }^{23}$ the clearing members participated in all transactions, and trades shown for clearing members total $164,910,000$ pounds, which is the total volume of trading, purchases plus sales. All of the trades handled in the first instance by nonclearing futures commission merchants are, of course, included in this total, and the figures shown for them refer to trades which were cleared and so are also recorded for clearing members. There are other duplications arising from trades given by one nonclearing futures commission merchant to other nonclearing merchants before being transmitted to clearing members. There is also a certain noncommensurability in the data which arises out of the variety of relations to the trading. The broad outlines of the situation, however, are reasonably clear. It is evident that the great bulk of the commission merchant business in wool top futures was carried on by

[^20]clearing members. Nonclearing class A members or their firms handled only $1,845,000$ pounds for customers, and other futures commission merchants handled only $10,180,000$ pounds for customers. There is some duplication in these figures. Since the total volume of trading, purchases plus sales, was $164,910,000$ pounds it is apparent that the amount of futures commission business done by nonclearing futures commission merchants was a very small proportion of the total.

Table 26.-Whol top futures: Number of futures commission merchants and exchange members, and volume of trading (purchases plus sales) for customers and for house accounts, ${ }^{1}$ Sept. 1, 1936, to June 30, 1938

| Classification | Commission merchants and members | Customers' trades |  | House accounts ${ }^{1}$ |  | Total trades |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Volume ${ }^{2}$ | Percent of total | Volume ${ }^{2}$ | Percent of total | Volume ${ }^{2}$ | Percent of total |
| Class A members: <br> Cleared wool top trades...- | $\begin{array}{r} \text { Number } \\ 49 \end{array}$ | $\begin{aligned} & 1,000 \mathrm{lb} . \\ & 106,885 \end{aligned}$ | Percent 64.8 | $\begin{aligned} & 1,000 \mathrm{lb} . \\ & 58,025 \end{aligned}$ | $\begin{array}{r} \text { Percent } \\ 35.2 \end{array}$ | $\begin{gathered} 1,000 \mathrm{lb} . \\ 164,910 \end{gathered}$ | $\begin{aligned} & \text { Percent } \\ & 100.0 \end{aligned}$ |
| Did not clear wool tops: Domestic | 16 | 910 |  | 525 | 36.6 |  | 100.0 |
| Foreign ${ }^{3}$ - | 8 | 935 | 100.0 |  |  | , 935 | 100.0 |
| Floor brokers | 9 |  |  | 1,910 | 100.0 | 1,910 | 100.0 |
| Total | 82 | 108,730 | 64.3 | 60, 460 | 35.7 | 169, 190 | 100.0 |
| Class B members: ${ }^{4}$ Domestic | 51 | 5,910 | 7.8 | 69,485 | 92.2 | 75,395 |  |
| Foreign ${ }^{3}$ | 2 | 860 | 100.0 |  |  | 860 | 100.0 |
| Total | 53 | 6,770 | 8.9 | 69,485 | 91.1 | 76, 255 | 100.0 |
| Nonmembers: |  |  |  |  |  |  |  |
| Domestic <br> Foreign ${ }^{3}$ | 28 11 | 3,010 400 | 73.9 100.0 | 1, 065 | 26.1 | 4,075 400 | $\begin{aligned} & 100.0 \\ & 100.0 \end{aligned}$ |
| Total | 39 | 3,410 | 76.2 | 1, 065 | 23.8 | 4,475 | 100.0 |
| Total futures commission merchants and exchange members. | 174 | 118, 910 | 47.6 | 131, 010 | 52.4 | 249, 920 | 100.0 |

${ }^{1}$ Includes trades of members, affiliated firms and their partners, and subsidiaries.
${ }^{2}$ Transferable notices are included in the volume of trading.
${ }^{3}$ Identities of customers of foreign commission merchants were not ascertained. It is assumed that all trading of foreign commission merchants was for customers.
${ }^{4}$ Exclusive of 3 members who also, directly or indirectly, held class A memberships.
The data presented in table 26 emphasize again the fact that class B members traded many times as much for themselves or their related interests as for customers, since only $5,910,000$ pounds were traded by domestic class B members for customers out of a total of $75,395,000$ pounds. As all these trades had to be cleared through clearing members it is apparent that they account for a very considerable proportion of the trades cleared for customers by clearing members. Nonmember futures commission merchants did a relatively small proportion of the wool top commission business.

The bulk of the clearing of wool top futures trades has been done by three clearing members. This is shown by the figures in table 27 for total clearances (purchases plus sales) by three groups of clearing members during the survey period.

The concentration of the clearing process is evident from the fact that three clearing members cleared 80.4 percent of all trades from September 1, 1936, to June 30, 1938. There were months during the survey period when the volume of trades cleared by these three clearing members amounted to more than 90 percent of the total.

The dominating position of these three clearing members was maintained during the remainder of 1938 and the first half of 1939. With the tremendous increase in wool top futures trading in September 1939 the proportion cleared by the three most important clearing members declined considerably. The proportion cleared in each quarter from October 1936 to the end of 1939 is shown in table 28. The maximum percentage was 88.5 in the second quarter of 1937 and the minimum was 45 percent in the last quarter of 1939. In October 1939 these three houses cleared only 40 percent of the total. This was the smallest proportion shown between September 1, 1936, and the end of 1939.

Table 27.-Total clearances (purchases plus sales) by three groups of clearing members during the survey period

| Clearing members | Volume cleared ${ }^{1}$ | Percent of total |
| :---: | :---: | :---: |
| Largest 3----...-- | $\begin{aligned} & 1,000 \mathrm{lb} . \\ & 125,860 \end{aligned}$ | Percent 80.4 |
| Next 8, including all having as much as 1 percent of clearances | 24,300 | 15.5 |
| Remaining 38 | 6,360 | 4.1 |
| Total | 156, 520 | 100.0 |

${ }^{1}$ Does not include transferable notices.
Table 28.-Percentage of total volume of wool top futures cleared by the three leading clearing members, by quarters, Oct. 1, 1936, to Dec. 31, 1939

| Year | First quarter | Second quarter | Third quarter | Fourth quarter |
| :---: | :---: | :---: | :---: | :---: |
| 1936 | Percent | Percent | Percent | Percent 86.2 |
| 1937 | 82.3 | 88.5 | 85.3 | 78.2 |
| 1938 | 78.5 | 78.1 | 72.6 | 70.2 |
| 1939.. | 75.7 | 80.2 | 55.3 | 45.0 |

At no other point in the activities of futures commission merchants is it possible to get a measure of the relative importance of different houses similar to that made available by the clearing process. The figures presented above, however, may be taken as a reasonably accurate statement of the distribution of commission business in wool top futures. The situation is one of very considerable concentration in the hands of three futures commission merchants. There were many days on which all transactions made were handled by these three houses, and there were numerous occasions when all the trading was cleared by one firm.

One of the most significant aspects of the concentration in wool top futures commission activities is the knowledge about the market situation and trading at particular times which is available to those who are connected with the dominating houses. This gains added importance when those connected with the futures commission business are also actively engaged in futures trading for their own account or occupy an important position in the market for spot wool or tops. In wool top futures two of the largest three clearing members were included in the largest three interests trading in the futures market.

The combined volume of trading of these three interests is shown monthly from September 1936 to December 1939 in table 29.

Table 29.-Wool top futures: Volume of trading ${ }^{1}$ by the largest three traders, September 1936 to December 1939

| Year and month | Largest 3 traders |  | Year and month | Largest 3 traders |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Volume | Percent of total |  | Volume | Percent of total |
| 1936 | 1,000 lb . | Percent | 1938 | 1,000 lb . | Percent |
| September | 1,320 |  | May-- | 3, 805 | 34.4 |
| November | 1, 625 | 41.3 | June- | 5,810 | 35.9 |
| December_ | 1,510 | 50.3 | August | 1,680 | 19.0 |
|  |  |  | September | 3, 970 | 33.0 |
| 1937 |  |  | October-- | 5,145 | 35.1 |
| January-- | 1,750 | 35.6 | November | 3, 550 | 26.5 |
| February | 860 | 33.1 | December. | 2, 935 | 34.8 |
| March | 1,320 | 36.6 |  |  |  |
| April | 3,380 | 52.7 | 1939 |  |  |
| May | 1,605 | 42. 2 | January -- | 3,150 | 35. 2 |
| June | 2, 145 | 56.3 | February | 2, 325 | 28.5 |
| July | 1,790 | 53.1 | March | 2, 900 | 33.9 |
| August | 1,245 | 46.5 | April | 3, 130 | 29.1 |
| September | 2, 810 | 42.6 | May | 3,585 | 33.3 |
| October- | 4, 270 | 40.9 | June | 3, 175 | 34.0 |
| November | 4, 115 | 22.8 | July | 4,960 | 34.6 |
| December | 3, 000 | 33.0 | August | 2, 160 | 25.4 |
|  |  |  | September- | 10, 670 | 15.0 |
| January 1938 |  |  | October- | 5, 770 | 13.6 |
| February | 6, 725 | 37.1 | November | 5, 380 | 15.0 |
| March--- | 3,815 | 32.7 | Dece | 5,305 | 23.4 |
| April.- | 3,025 | 34.7 | Total | 134, 550 | 27.9 |

${ }^{1}$ Purchases plus sales.
House accounts, accounts of wholly owned subsidiaries and partners' accounts were combined and considered as one trader for the purposes of this table. The largest three traders were doing over half of all the trading late in 1936. Thereafter their relative importance declined, the low point being October 1939, when their trades amounted to 13.6 percent of the total.

Two top makers are included among the largest three futures traders, and also among the largest three wool top futures commission merchants. As top makers they naturally have many connections in the wool industry. Both are large buyers of wool, and are thus important as actual or potential customers for many dealers. They engage commission combers to manufacture tops for them, and they sell tops to spinners and other mills. It is impossible to say to what extent dealers and other members of the wool industry may have been influenced by this situation in placing their orders for wool top futures through these top makers. Examination of the lists of customers of these two firms shows that a large proportion are connected with the wool industry. It appears that 78 percent of their customers were dealers, mills, or industry-connected speculators. Less than 41 percent of the customers of all other clearing members combined fell into these classifications.

Examination of the list of customers brought out a further point of interest. This is the fact that many firms in the wool industry have futures accounts with two, three, or even four different futures commission merchants. Possible purposes for such multiple accounts are to avoid disclosure of one's full futures business and to acquire the good will of the futures commission merchants.

It is interesting that 14 top makers maintained 24 accounts, a higher number of accounts per firm than was found in any other classification. The 98 dealers had 147 accounts, showing a rather high percentage of multiple accounts. In contrast, the only classification not showing multiple accounts was the wool growers, 14 growers having but 14 accounts. Foreign traders, virtually all thought to be commission houses, speculators not related to the industry, and clothing manufacturers generally had single accounts. The average numbers of accounts per trader for other classifications of traders were somewhat above those for the last groups, but considerably below those of top makers and dealers. Approximately one-half of the accounts of dealers, mills, and industry-connected speculators were with the 2 top maker clearing firms. On the other hand, the bulk of the accounts of futures commission merchants and floor brokers and all but 12 of the accounts of speculators not related to the industry were held with the miscellaneous commission-house group.

The evidence on the relations between exchange membership activities on the wool top futures market may now be summarized. The majority of the class A members has not participated in the wool top futures market at all. They are members of the cotton exchange who have had no occasion to trade in wool top futures either for themselves or for customers. Most of the class A members who participated in the market did so in connection with the trading of customers. Most of the B members traded for their own accounts only. A few B members traded both for customers and themselves but their business for customers was relatively small. A small group of class A members traded both for customers and for themselves. Trading in which they participated dominated the total trading, and the major part of their activity was accounted for by two top makers. Nonmember futures commission merchants played a distinctly minor role.

The varied activities of two top makers, considering the firms, partners and affiliates together, were a significant feature of the wool top futures market. In the brokerage business connected with the exchange, these two top makers were among the largest three clearing members and also among the largest three futures commission merchants. The same two firms were included among the largest three traders and among the largest three holders of commitments on a number of quarterly dates. In the delivery process they played a dominating role. It is evident that there was definite concentration in the wool top futures market during the survey period.

## UNDESIRABLE PRACTICES

Since the detailed study of wool top futures trading extended back to a period prior to the application of the Commodity Exchange Act to such trading, some significance attaches to the discovery of practices in this earlier period which would have been illegal if the Commodity Exchange Act had then applied to wool tops. It was found, for example, that wash sales had taken place. There were many days, particularly during the first year of the survey period, when only one trade was made in a given future and this lone trade was a wash sale, the buyer and seller being identical and no actual trading being involved. A quotation was established, nevertheless, and
published on the daily quotation sheet of the New York Wool Top Exchange. This practice certainly created a false impression of activity, and the price quotations published as a result were, of course, entirely fictitious. No sales were observed during the approximately 3 months in the survey period subsequent to the amendment of April 7, 1938, which could positively be identified as wash sales. Not only are wash sales illegal under the Commodity Exchange Act, but they are contrary to the rules of the exchange.

Matching of orders also occurred with considerable frequency. In this practice a futures commission merchant or a floor broker with an order to buy and an order to sell matches these orders in whole or part and records the trade as executed between his two customers. In such cases the question arises as to whether for both customers the prices were the best that could have been obtained. If this is not the case there has been discrimination against one of the customers. When no other trading is being done at the time, the question arises how an equitable price could have been established. It was noted that often trades involving matched orders were the only trades in the future for the day. This happened so frequently as to cause surprise that with so few orders coming into the market at the time, the same futures commission merchant in so many instances would have the only buying and selling orders which could be executed. Matching of orders was done by several futures commission merchants. The frequency with which it occurred declined as the volume of trading increased.

The taking of the opposite side of customers' orders without the prior consent of the customer is prohibited under the Commodity Exchange Act. It is also a violation of the rules of practically all commodity exchanges. This practice was found to have existed on the wool top exchange prior to April 7, 1938. By this practice a futures commission merchant, or a floor broker, having an order to buy or to sell, himself takes the opposite side of the trade, thus acting as both principal and agent in the same transaction. Here again the question of the fairness of the price to the customer is raised, particularly, as was frequently the case, when there was no other trading in the future at the time, or even on the day on which the trade occurred. This practice also was not confined to a single firm, but was engaged in by several firms or floor brokers. There can be no question that it is a serious deviation from fair and equitable practice in the handling of customers' orders.

## SUMMARY AND CONCLUSIONS

There has been a strong desire for information about the wool top futures market. The study of this market provides an opportunity to observe the rise of futures trading from a position of small volume and little significance to one of considerable volume and real importance in the marketing of wool. The Commodity Exchange Administration therefore has made an effort to secure detailed and comprehensive information about trading in wool top futures. This report presents much of the information secured up to the present time.

The New York Wool Top Exchange is, in general, similar in organization to other futures markets, but has certain peculiarities because of its relation to the New York Cotton Exchange. Members of the cotton exchange are automatically class A members of the wool top
exchange. The majority of these members did not participate in the wool top futures market at all. The trading of most of the remaining class A members was largely for customers and was carried on as a relatively minor adjunct to their cotton futures business. A small group of class A members, including two top makers, traded in large volume in wool tops, both for themselves and for customers. Most of the class B members of the Exchange were connected with the wool trade and membership was of value to them largely because of the lower commission rates on their own trades.

From the beginning of trading in wool top futures in 1931 there was a relatively steady but slow growth until the summer of 1936. From September 1936 to the end of 1939, the "survey" and "partial-survey" periods included in this study, the growth of trading was much more rapid. Volume of trading in December 1939 was nearly 10 times the volume in September 1936, while open contracts were 8 times greater. There were 3 periods from 1936 to 1939 during which trading and commitments increased markedly. In each period a sharp price change was accompanied by larger trading volume. Open contracts rose somewhat more slowly but tended to increase for some months after the major price movement ended. By the end of the period the market was broader, more closely related to prices and presumably more important in the marketing of wool and its products than it had been at the beginning of the survey.

This growth in the market is also reflected in the detailed study of all trading during the survey period from September 1, 1936, to J゙une 30, 1938. This survey revealed that there were nearly four times as many traders at the end as at the beginning and their average commitments were also larger. Most of the traders in the market had some connection with the wool industry. A high proportion of the open contracts at both dates were held by top makers, dealers, and mills.

There was considerable turn-over in the body of traders in the market. Of 431 different traders who participated in trading at some time during the survey period, 218 held positions at the end while 213 had left the market. Approximately half of the traders in each of these 2 groups made profits, and half suffered losses, when a rough adjustment was made for commission costs. When the amounts of gains and losses were considered, the results were somewhat different. The group of traders leaving the market had aggregate losses considerably in excess of profits while the traders remaining had total gains exceeding losses.

In any futures market the losses always equal profits for the group of traders as a whole, if accrued profits and losses are included and commission charges ignored. During the survey period more persons made profits than losses, the average profit being smaller than the average loss. Because of the sharp decline in prices during the period, longs in general suffered losses while shorts made profits. Individual longs had profits, however. In fact, the number of longs with profits was greater than the number with losses, but the average profit was much smaller than the average loss. Top makers and mills suffered losses greater than profits, but profits of dealers exceeded their losses. To the extent that the trades of these three groups represented hedging operations, there would have been roughly compensating gains or losses on the corresponding spot operations.

The characteristics of a class of professional speculators were found most nearly in the group of speculators who had some connection with the industry. Some of the trading for the business accounts of firms in the wool trade was undoubtedly speculative, but separation of hedging and speculative trades would have required too exhaustive an investigation. If the futures trading of firms engaged in some aspect of the wool industry is considered nonspeculative, there was no evidence of the existence of a body of professional speculators in the wool top futures market trading on a scale where their greater knowledge of the market and skill could be considered to have had an appreciable effect on prices. While the survey period may not have been typical with respect to profits, speculators not connected with the wool trade fared better than the industry-connected speculators, the profits of the former exceeding their losses, while the latter had losses in excess of profits.
Trading by foreigners on the New York wool top market was relatively unimportant. While the European exchanges were open a considerable volume of trading on them originated in this country. Short hedging positions held by American firms in foreign markets were surprisingly large, surpassing on occasions their short-hedged positions in New York.
In the period covered by the survey prior to April 7, 1938, when wool tops were included under the Commodity Exchange Act, certain practices were discovered which are illegal under the act and contrary to the rules of the exchange. These practices included wash sales and the taking of the opposite side of customers' orders without the customer's prior consent.

A high degree of concentration existed on the wool top exchange during the survey period. More than half of the total trading on the New York exchange was done by 10 traders, and nearly one-third by three traders. Further evidence of concentration was found in the substantial proportion of commitments, both long and short, held by the largest three traders on a number of dates and the persistence with which particular traders appeared among the largest three. Comparable situations as to positions were found, however, in some other futures markets. Delivery of wool tops on contracts was heavily concentrated in the hands of the group of top makers. Within this group there was further concentration and delivery was accomplished very largely by the transferring of wool tops from one of two top makers to the other.
Concentration in the wool top futures market was also found in the clearing process. Over 80 percent of all trades were cleared by three firms. A small group of eight class A members and seven class B members traded in large volume for themselves, their affiliated interests, and for their own customers. The combined trading of this group was over half of the total volume during the survey period. Exchange membership was of value to this group because of the reduced commission costs on their house trades and because of the commissions earned on trades of their customers. The eight class A members also cleared trades for other members of the exchange. These members consequently had information as to positions held by themselves and others constituting substantial proportions of all open contracts.

One further aspect of concentration was found in the role played by two large top makers. The two top makers were among the largest three participants in trading and delivery and also among the largest three holders of positions on a number of dates. They were also among the largest three clearing members and the largest three futures commission merchants. Because of their important position in the market for spot wool and tops and the magnitude of their house and customers' operations in futures, knowledge of the market situation was available to them to an unusual degree.

Top makers as a class have certain advantages over most other trade interests, growers and the public because trading in the New York market is in wool tops. They have accurate information on conversion costs and knowledge of available combing facilities not obtainable by most other individuals. Because of the magnitude of their operations they are also in a position to know with greater certainty than most other interests the grades and qualities of wool and spot top available, both immediately and in the future. Price spreads between wool on a clean basis and spot tops are determined principally by the costs of conversion. The amounts by which the prices of good quality spot tops generally exceed futures prices are influenced largely by availability of particular grades or types of tops. Accurate knowledge of these conditions is concentrated largely in the hands of top makers. Both futures prices and the spreads between futures and clean wool prices are influenced by these cost and quality factors. It is evident that top makers occupy a peculiarly favorable position in a wool top futures market. The undue advantage held by top makers over other traders would presumably be reduced in a futures market in which trading was conducted in wool rather than in wool tops. ${ }^{24}$

[^21]
## APPENDIX

Table 30.-Prices and price spreads: Wool tops, futures and spot, and raw wool, by months, May 1931 to December 1939
[In cents per pound]

| Year and month | Wool tops |  |  | Wool | Price spreads |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Future |  | Average fine domestic spot ${ }^{2}$ | $\begin{aligned} & \text { Territory } \\ & \text { fine } \\ & \text { staple } \end{aligned}$ | Wool basis 4 | Spot top | $\begin{aligned} & \text { Spot top } \\ & \text { and } \\ & \text { wool } 6 \end{aligned}$ |
|  | Dominant future | Price ${ }^{1}$ |  |  |  |  |  |
| 1931 |  |  |  |  |  |  |  |
|  | September $\qquad$ do | 73.0 | 84.5 | 63.5 | 9.5 | 11.5 | 21.0 |
| June |  | 69.5 | 82.7 | 61.5 | 8.0 | 13.2 | 21.2 |
| July_ | March | 72.8 | 84.2 | 61.9 | 10.9 | 11.4 | 22.3 |
| August | ----_do. | 72.8 | 86.1 | 63.5 | 9.3 | 13.3 | 22.6 |
| September | --_do. | 69.5 | 83.2 | 62.1 | 7.4 | 13.7 | 21.1 |
| October | --.-- do. | $\begin{aligned} & 66.7 \\ & 68.0 \end{aligned}$ | 81.0 | 59.4 | 7.3 | 14.3 | 21.6 |
| November | -do |  | 79.5 | 59.0 | 9.0 | 11.5 | 20.5 |
| December | -do. | 67.0 | 78.0 | 59.0 | 8.0 | 11.0 | 19.0 |
| 19.32 |  |  |  |  |  |  |  |
| January -- | July | 68.2 | 77.2 | 57.8 | 10.4 | 9.0 | 19.4 |
| February | ----do | 68.2 | 77.2 | 56.0 | 12.2 | 9.0 | 21.2 |
| March. | do | 64.6 | 74.8 | 53.8 | 10.8 | 10.2 | 21.0 |
| April. | December | 60.4 | 71.0 | 49.1 | 11.3 | 10.6 | 21.9 |
| May | -.-do | 55.7 | 65.7 | 43.6 | 12.1 | 10.0 | 22.1 |
| June_ | -_do | 49.7 | 55.4 | 38.4 | 11.3 | 5.7 | 17.0 |
| July | January | 48.5 | 50.5 | 36.5 | 12.0 | 2. 0 | 14.0 |
| Aucust --- | March | 54.8 | 54.0 | 40.6 | 14.2 | -. 8 | 13.4 |
| September | -_do | 60.9 | 67.4 | 47.8 | 13.1 | 6.5 | 19.6 |
| October | do | 53.1 | 67.1 | 48.5 | 4.6 | 14.0 | 18.6 |
| November. | -do. | 51.551.6 | 62.0 | 46.7 | 4.8 | 10.5 | 15.3 |
| December-. | May. |  | 56.8 | 45.0 | 6.6 | 5.2 | 11.8 |
| 1933 |  |  |  |  |  |  |  |
| January- | . do | 53.5 | 56.5 | 44.0 | 9.5 | 3.0 | 12.5 |
| February | ---do | 48.9 | 54.9 | 44.0 | 4. 9 | 6. 0 | 10.9 |
| March.-- | October | 52.9 | 58.8 | 45.6 | 7.3 | 5. 9 | 13.2 |
| April | ---.-do | 58.1 | 63.2 | 48.5 | 9.6 | 5.1 | 14.7 |
| May | --do | 73.9 | 80.9 | 62.4 | 11.5 | 7.0 | 18.5 |
| June. | ..do | 87.0 | 90.1 | 70.0 | 17.0 | 3.1 | 20.1 |
| July | December | 95.7 | 102.5 | 77.4 | 18.3 | 6.8 | 25.1 |
| Aurust | January -- | 94.7 | 106.3 | 79.1 | 15.6 | 11. 6 | 27.2 |
| September | March | 104.0 | 111.0 | 81.8 | 22.2 | 7.0 | 29.2 |
| October | - do | 100.7 | 113.5 | 83.0 | 17.7 | 12.8 | 30.5 |
| November | do | $\begin{aligned} & 104.0 \\ & 105.1 \end{aligned}$ | 113.4 | 84.0 | 20.0 | 9.4 | 29.4 |
| December | May |  | 114.8 | 85.0 | 20.1 | 9.7 | 29.8 |
| 1934 |  |  |  |  |  |  |  |
| January | July | 108.4 | 115.1 | $8 \mathrm{CL}$. | 22.2 | 6. 7 | 28.9 |
| February | ---.do | 108.5 | 114. 0 | 87.0 | 21.5 | 5.5 | 27.0 |
| March. | ...do. | 105.0 | 113.6 | 87.0 | 18.0 | 8.6 | 26.6 |
| April | --_do | 100.1 | 112.5 | 85.5 | 14.6 | 12.4 | 27.0 |
| May | October | 90.5 | 110.8 | 84.7 | 5.8 | 20.3 | 26.1 |
| June | .-.-do_ | 89.6 | 110.5 | 84.5 | 5.1 | 20.9 | 26.0 |
| July | December | 86.9 | 105.0 | 84.5 | 2.4 | 18. 1 | 20.5 |
| August | -.---do. | 79.7 | 97.4 | 76.0 | 3.7 | 17.7 | 21.4 |
| September. | .-.do | 77.9 | 97.5 | 76.0 | 1.9 | 19.6 | 21.5 |
| October | -_do | 78.4 | 95.2 | 76.0 | 2. 4 | 16.8 | 19.2 |
| November. | May.- | 80.0 | 87.0 | 76.0 | 4. 0 | 7.0 | 11.0 |
| December------- | ----do--------- | 78.3 | 86.2 | 76.0 | 2.3 | 7.9 | 10.2 |

[^22]Table 30-Prices and price spreads: Wool tops, futures and spot, and raw wool, by months, May 1931 to December 1939-Continued
[In cents per pound]

| Year and month | Wool tops |  |  | Wool | Price spreads |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Future |  | A veragefinedomesticspot | Territory fine staple | Wool basis | $\begin{aligned} & \text { Spot top } \\ & \text { basis } \end{aligned}$ | Spot top and wool |
|  | Dominant future | Price |  |  |  |  |  |
| 1935 |  |  |  |  |  |  |  |
| January |  | 76.073.4 | $\begin{aligned} & 87.2 \\ & 84.5 \end{aligned}$ | $\begin{aligned} & 76.0 \\ & 71.0 \end{aligned}$ | 2.4 | 11.211.1 | 11.213.5 |
| February | July - - |  |  |  |  |  |  |
| April.- | December- | 73.6 | 81.8 | 65.8 |  | 8.5 | 16.8 16.0 |
| May. | ---do-- | 79.1 | 83.8 | 67. 6 | 11.9 | 8.5 | 16.617.2 |
| June. | -----do. | 82.4 | 91.2 | 74.0 | 8.4 | 8.8 |  |
| July | do. | 83.6 | 92.3 | 75.5 | 8.1 | 8.6 | 16.7 |
| August | -----do- | 84.489.6 |  |  | $\begin{array}{r}8.9 \\ 10.8 \\ \hline 8\end{array}$ | 7.9 | 16.8 |
| September | - do |  | 97.2 | 78.8 |  | 7.6 | 18.818.418.5 |
| October-- | March | 93.196.695.7 | 98.7 | 80.2 | 12.9 | 5. 6 |  |
| November | --do |  | $\begin{aligned} & 102.6 \\ & 102.9 \end{aligned}$ | $83.9$ | 12.711.5 | 6.07.2 | 18.7 |
| December | do |  |  |  |  |  |  |
| 1936 |  |  |  |  |  |  |  |
| January | May_-.......-.....- | 99.7 | 109.4 | 88.1 | 11. 6 | 9. 7 | 21.3 |
| February | ---do ------ | 19.995.8 | 114.2113.9 | 93.894.0 | 8.1 | 12.318.1 | 20.4 |
| March | July |  |  |  |  |  | 19.9 |
| April | October | 94.3 | 108.5 | 88.9 | 5.4 | 14.2 | 19.619.0 |
| May | December | 95.1 | 107.0106.6 | 88.089.0 | 8.0 | 11.0 |  |
| June | -----do |  |  |  | 6.1 | 11.510.7 | 17.615.9 |
| July | do | 96.4 | 104.9105.1 | 89.089.0 | 5.2 |  |  |
| August | March |  |  |  | 7.46.6 | 8.711.2 | 16.1 |
| September | ---.-do. | 95.6 | 106.8 | 89.0 |  |  | 17.818.6 |
| October-- | do | 79.2111.1111.4 | $\begin{aligned} & 108.6 \\ & 122.4 \end{aligned}$ | $\begin{aligned} & 90.0 \\ & 99.0 \end{aligned}$ | 7.2 | 11.4 |  |
| November | July |  |  |  | 12.1 | 11.3 | 18.623.424.9 |
| December |  | 111.4 | 131.7 | 106.8 | 4.6 | 20.3 |  |
| 1997 |  |  |  |  |  |  |  |
| January | do | 115.2 | 135.0 | 114.0 | 1.2 | 19.8 | 21.0 |
| February | . do. | 108.0 | 127. 6 | 114.0 | -6.0 | 19.6 | 13.6 |
| March | October | 113.6114.7 | 126.8 | 113.0113.0 | 1.71.6 | 12.1 |  |
| April | do |  |  |  |  |  | 11.8 |
| May | March | 108.7108.9 | $\begin{aligned} & 124.1 \\ & 117.9 \end{aligned}$ | 104.9102.0 | 3.86.9 | 9.0 |  |
| June. | -----do |  |  |  |  |  | 15.9 |
| July -- | --do | 110.8 <br> 110.0 | 118.4117.2 | 102.0102.0 | 8.88.0 | 7.67.2 | 16.415.2 |
| August | do |  |  |  |  |  |  |
| September | --.do | 103.7 | 113.1 | 102.0 98.5 | 5. 2 | 9.4 | 15.2 |
| October | May_-JulyOctober | $\begin{aligned} & 94.2 \\ & 81.1 \\ & 82.8 \end{aligned}$ | $\begin{array}{r} 103.1 \\ 93.6 \\ 90.6 \end{array}$ | 82.180.980.9 | $\begin{array}{r} 1.1 \\ 2.1 \\ -4.8 \end{array}$ | $\begin{array}{r}8.9 \\ 12.5 \\ \hline .7\end{array}$ | 11.07.79.7 |
| November |  |  |  |  |  |  |  |
| December |  |  |  |  |  | 7.8 |  |
| 1938 |  |  |  |  |  |  |  |
| January | ._do | 78.2 | 88.0 | 77.4 | 0.8 | 9.8 | 10.6 |
| February | -do | 75.177.1 | $\begin{aligned} & 82.1 \\ & 83.7 \end{aligned}$ | $\begin{aligned} & 70.6 \\ & 69.0 \end{aligned}$ | 4.5 | 6. 6 | 11.514.7 |
| March_ | do- |  |  |  | 9.2 |  |  |
| April | December | $\begin{aligned} & 78.2 \\ & 76.0 \end{aligned}$ | 83.881.8 | $\begin{aligned} & 69.0 \\ & 68.0 \end{aligned}$ |  | 5. 6 | 14.7 14.8 |
| May | - do. |  |  |  | 8.0 | 5.8 | 13.8 |
| June | March | $\begin{aligned} & 75.1 \\ & 82.6 \end{aligned}$ | 79.0 | 65.0 | 10.1 | 3.9 | 14.0 |
| July | --do |  | 85.8 | 68.6 | 14.0 | 3.2 | 17.2 |
| August | do | 80.7 | 85.4 | 71.2 | 9.5 | 4.7 | 14.2 |
| September | do. | 81.5 | 84.4 | 70.0 | 11.5 | 2.9 | 14.4 |
| October | do | 83.9 | 86.5 | 71.0 | 12.9 | 2.6 | 15.5 |
| November. | _-do | 83.0 | 86.6 | 72.8 | 10.2 | 3.6 | 13.8 |
| December | .-do. | 79.5 | 84.8 | 71.9 | 7.6 | 5.3 | 12.9 |
| 19.99 |  |  |  |  |  |  |  |
| January | do | 81.1 | 87.2 | 72.2 | 8.9 | 6.1 | 15.0 |
| February | October | 80.9 | 90.1 | 73.8 | 7.1 | 9.2 | 16.3 |
| March_ | ---do | 79.4 | 87.7 | 71.8 | 7.6 | 8.3 | 15.9 |
| April | --do | 78.8 | 85.0 | 69.0 | 9.8 | 6.2 | 16.0 |
| May | .-.do | 80.2 | 87.5 | 69.8 | 10.4 | 7.3 | 17.7 |
| June.- | -.do- | 79.7 | 87.4 | 70.8 | 8.9 | 7.7 | 16.6 |
| July | do | 82.2 | 88.3 | 71.9 | 10.3 | 6.1 | 16.4 |
| August | December | 81.3 | 90.5 | 74.0 | 7.3 | 9.2 | 16.5 |
| September | March | 108.4 | 124.8 | 98. 8 | -9.6 | 16.4 | 26.0 |
| October-..- | ---do. | 107.3 | 130.0 | 109.5 | $-2.2$ | 22.7 | 20.5 |
| November | --do- | 1022 | 126.6 | 105.4 | $-3.2$ | 24.4 | 21.2 |
| December | .-.-do | 103.7 | 121.0 | 105.8 | -2.1 | 17.3 | 15.2 |

Table 31.-Wool top futures: Open contracts, volume of trading, and average price, daily, ${ }^{1}$ by futures, Sept. 1, 1936, to June 30, 1938

1936 OCTOBER FUTURE

| Date | Open contracts | Volume of trading | Average price per pound | Longs |  | Shorts |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Purchases | Sales | Purchases | Sales |
| Sept ${ }_{2} 1936$ | 1,000 lb. | 1,000 lb. | Cents | 1,000 lb. | 1,000 lb. | 1,000 lb. | 1,000 lb. |
| Sept. 3 | 430 430 | 10 5 | 96.0 |  | 10 | 10 |  |
| Sept. 4 | 425 | 5 | 96.5 |  | 5 | 5 |  |
| Sept. 5 | 420 | 5 | 96.5 |  | 5 | 5 |  |
| Sept. 8 | 410 | 10 | 96.5 | ----------- | 10 | 10 |  |
| Sept. 9 | 325 | 140 | 96.8 |  | 85 | 140 | 55 |
| Sept. 10 | 290 | 35 | 96.9 |  | 35 | 35 |  |
| Sept. 14 | 280 | 10 | 96.0 |  | 10 | 10 |  |
| Sept. 15 | 280 | 10 | 96.0 |  |  | 10 | 10 |
| Sept. 16 | 280 | 5 | 96.0 |  |  | 5 | 5 |
| Sept. 17 | 250 | 70 | 96.0 | 20 | 50 | 50 | 20 |
| Sept. 19 | 250 | 10 | 95.5 | 10 | 10 |  |  |
| Sept. 21 | 220 | 30 | 95.0 |  | 30 | 30 | .- |
| Sept. 23 | 165 | 55 | 94.8 |  | 55 | 55 | -- |
| Sept. 24 | 160 | 5 | 94.1 |  | 5 | 5 |  |
| Sept. 25 | 35 | 150 | 94.3 | 5 | 130 | 145 | 20 |
| Oct. 2 |  | 35 | 95.0 |  | 35 | 35 |  |
| Total |  | 590 |  | 35 | 480 | 555 | 110 |
| A verage |  |  | 95.6 | ---------- |  |  |  |

1936 NOVEMBER FUTURE

| 1996 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Oct. 14 | 15 | 5 | 96.5 | 5 | 5 |  |  |
| Oct. 26 | 15 | 15 | 98.5 |  |  | 15 | 15 |
| Oct. 27 |  | 15 | 98.1 |  | 15 | 15 |  |
| Oct. 29 | 15 | 15 | 99.0 | 15 |  |  | 15 |
| Oct. 30 |  | 15 | 98.5 |  | 15 | 15 |  |
| Nov. 4 | 15 | 15 | 100.5 | 15 |  |  | 15 |
| Nov. 5 |  | 15 | 100.0 |  | 15 | 15 |  |
| Total |  | 95 |  | 35 | 50 | 60 | 45 |
| Average |  |  | 99.0 |  |  |  |  |

1936 DECEMBER FUTURE

| 1936 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sept. 1-. | 570 | 10 | 96.0 |  | 10 | 10 |  |
| Sept. 2 | 570 | 5 | 95.9 |  |  | 5 | 5 |
| Sept. 10 | 570 | 5 | 96.5 |  |  | 5 | 5 |
| Sept. 11 | 570 | 5 | 96.8 |  |  | 5 | 5 |
| Sept. 17 | 570 | 15 | 95.0 | 5 | 5 | 10 | 10 |
| Sept. 18 | 570 | 5 | 95.5 |  |  | 5 | 5 |
| Sept. 19 | 570 | 5 | 95.0 |  |  | 5 | 5 |
| Sept. 21 | 565 | 5 | 94.0 |  | 5 | 5 |  |
| Sept. 23 | 565 | 5 | 94.0 |  |  | 5 | 5 |
| Sept. 25 | 565 | 10 | 94.0 |  |  | 10 | 10 |
| Sept. 26 | 565 | 5 | 94.5 |  |  | 5 | 5 |
| Sept. 28 | 565 | 5 | 94.5 |  |  | 5 | 5 |
| Sept. 29 | 565 | 5 | 94.0 |  |  | 5 | 5 |
| Sept. 30 | 565 | 5 | 94.6 |  |  | 5 | 5 |
| Oct. 2 | 565 | 5 | 94.5 |  |  | 5 | 5 |
| Oct. 6 | 565 | 5 | 94.6 |  |  | 5 | 5 |
| Oct. 7 | 535 | 45 | 95.2 | 15 | 45 | 30 |  |
| Oct. 8 | 535 | 5 | 95.5 |  |  | 5 | 5 |
| Oct. 9 | 515 | 20 | 95.5 |  | 20 | 20 |  |
| Oct. 10 | 510 | 5 | 95.5 |  | 5 | 5 |  |
| Oct. 13 | 480 | 45 | 96.4 | 15 | 45 | 30 |  |
| Oct. 16 | 480 | 5 | 96.5 | 5 | 5 |  |  |
| Oct. 19 | 460 | 20 | 97.0 |  | 20 | 20 |  |
| Oct. 21 | 460 | 5 | 97.5 | 5 | 5 |  |  |
| Oct. 22 | 460 | 5 | 97.5 | 5 | 5 |  |  |
| Oct. 23 | 450 | 15 | 97.5 | 5 | 15 | 10 |  |
| Oct. 26 | 445 | 5 | 98.5 |  | 5 | 5 |  |
| Oct. 29 | 450 | 10 | 98.9 | 10 | 5 |  | 5 |
| Oct. 30 | 450 | 15 | 98.9 | 15 | 15 |  |  |
| Nov. 2 | 430 | 20 | 99.8 |  | 20 | 20 |  |

${ }^{1}$ Days on which no trading was reported are omitted.

Table 31.-Wool top futures: Open contracts, volume of trading, and average price, daily, by futures, Sept. 1, 1936, to June 30, 1938-Continued

1936 DECEMBER FUTURE-Continued

| Date | Open contracts | Volume of trading | Average price per pound | Longs |  | Shorts |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Purchases | Sales | Purchases | Sales |
| $\text { Nov. } 5_{-}^{1936}$ | $\begin{array}{r} 1,000 \mathrm{lb} . \\ 365 \end{array}$ | $1,00075 .$ | Cents 101.8 | 1,000 lb. | $1,000 \mathrm{lb}$ | 1,000 lb. 6 | 1,000 lb. |
| Nov. 7 | 355 | 20 | 102. 7 | 10 | 20 | 10 |  |
| Nov. 9 | 330 | 30 | 104.0 |  | 25 | 30 | 5 |
| Nov. 10 | 325 | 10 | 103. 8 | 5 | 10 | 5 |  |
| Nov. 13 | 315 | 20 | 103.5 | 10 | 20 | 10 | ------------ |
| Nov. 14 | 290 | 25 | 104.9 |  | 25 | 25 | --------- |
| Nov. 16 | 280 | 10 | 105.5 |  | 10 | 10 | --------- |
| Nov. 17 | 270 | 10 | 106.0 |  | 10 | 10 | ---------- |
| Nov. 18 | 225 | 45 | 106.3 |  | 45 | 45 | ---------- |
| Nov. 19 | 200 | 25 | 106.5 |  | 25 | 25 | ----------- |
| Nov. 20 | 170 | 30 | 107.7 |  | 30 | 30 | ---------- |
| Nov. 21 | 170 | 5 | 109.0 | 5 | 5 |  |  |
| Nov. 23 | 170 | 25 | 110.0 | 25 | 25 |  |  |
| Nov. 25 | 160 | 10 | 108.0 |  | 10 | 10 |  |
| Dec. 1 | 120 | 40 | 108.5 |  | 40 | 40 |  |
| Dec. 16 | 100 | 20 | 113.0 |  | 20 | 20 |  |
| Dec. 19 | 100 | 45 | 114.0 |  |  | 45 | 45 |
| Dec. 21 | 55 | 45 | 114.0 |  | 45 | 45 |  |
| Dec. 23 |  | 55 | 115.0 |  | 55 | 55 |  |
| Total |  | 855 |  | 135 | 715 | 720 | 140 |
| Averag |  |  | 103.7 |  |  |  |  |

1937 JANUARY FUTURE


Table 31.-Wool top futures: Open contracts, volume of trading, and average price, daily, by futures, Sept. 1, 1936, to June 30, 1938-Continued

1937 FEBRUARY FUTURE


1937 MARCH FUTURE

| $\text { Sept. }{ }^{1936}$ | 295 | 5 | 96.0 |  | 5 | 5 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sept. 4 - | 270 | 25 | 96.5 |  | 25 | 25 |  |
| Sept. 5 - | 270 | 10 | 96.5 | 10 | 10 |  |  |
| Sept. 8 | 255 | 15 | 96.5 |  | 15 | 15 |  |
| Sept. 9 | 295 | 50 | 96.8 | 50 | 10 |  | 40 |
| Sept. 10 | 295 | 15 | 97.0 | 10 | 10 | 5 | 5 |
| Sept. 15 | 295 | 5 | 96.0 | 5 | 5 |  |  |
| Sept. 16 | 295 | 5 | 96.0 |  |  | 5 | 5 |
| Sept. 17 | 270 | 25. | 95.5 |  | 25 | 25 |  |
| Sept. 18 | 220 | $50^{\circ}$ | 95.5 |  | 50 | 50 |  |
| Sept. 19 | 210 | 10 | 95.5 |  | 10 | 10 |  |
| Sept. 22 | 210 | 5 | 95.0 | 5 | 5 |  |  |
| Sept. 23 | 245 | 40 | 94.9 | 35 |  | 5 | 40 |
| Sept. 25 | 295 | ${ }^{70} 5$ | 95.4 95.0 |  |  | 20 5 | 70 5 |
| Sept. 28 | 295 | 5 | 94.8 |  |  | 5 | 5 |
| Sept. 29 | 295 | ${ }_{5}^{5}$ | 95.0 |  |  | 5 | 5 |
| Sept. 30 | 295 | 5 | 95.6 |  |  | 5 |  |
| Oct. 1 | 290 | 5 | 95.6 |  | 5 | 5 |  |
| Oct. 2 | 290 | 5 | 95.5 |  |  | 5 |  |
| Oct. 3 | 290 | 5 | 95. 5 |  |  | 5 | 5 |
| Oct. 5 | 290 | 5 | 95.3 |  |  | 5 | 5 |
| Oct. 7 | 290 | 5 | 95.6 |  |  | 5 |  |
| Oct. 8 | 285 | 5 | 96.0 |  | 5 | 5 |  |
| Oct. 13 | 270 | 35 | 98.0 |  | 15 | 35 | 20 |
| Oct. 14 | 270 | 15 | 98.0 |  |  | 15 | 15 |
| Oct. ${ }^{15}$ | 270 | 5 | 98.0 |  |  | 5 |  |
| Oct. 16 | 275 | 15 | 98.0 | 5 |  | 10 | 15 |
| Oct. 21 | 275 | 25 | 98.5 | 25 | 25 |  |  |
| Oct. 23- | 255 | 25 | 99.0 | 5 | 25 | 20 |  |
| Oct. 28 | 250 | 15 | 100.0 |  | 5 | 15 | 10 |
| Oct. ${ }^{\text {Oct. }} 39$ | 230 | 20 | 100.0 |  | 20 | 20 |  |
| Oct. 31 | 240 | $\stackrel{5}{5}$ | 100.0 | 6 |  | 5 |  |
| Nov. 2 | 245 | 5 | 101.0 | 5 |  |  |  |
| Nov. 4 | 245 | 25 | 101.5 |  |  | 25 | 25 |
| Nov. 5 | 245 | 40 | 102.4 |  |  | 40 | 40 |
| Nov. 13 | 245 | 5 | 110.0 | 5 | 5 |  |  |
| Nov. 14 | 245 | 10 | 107.5 | 10 | 10 |  |  |
| Nov. 16 | 245 | 5 | 111.7 | 5 | 5 |  | 20 |
| Nov. 25 | 265 | ${ }_{20}$ | 114.0 | 20 | 20 |  |  |
| Nov. 28 | 265 | 5 | 109.0 | 5 | 5 |  |  |
| Nov. 30 | 275 | 10 | 109.0 | 10 |  |  | 10 |
| Dec. 1 | 250 | 70 | 108. 7 | 20 | 45 | 50 | 25 |
| Dec. 3 | 250 | 25 | 108.7 | 25 | 25 |  |  |
| Dec. 4 | 250 | 5 | 113.0 |  | 5 |  |  |
|  | 250 | 5 | 109.7 |  |  | 5 | 5 |
| Dec. 16 | 235 | 25 | 113.3 | 5 | 20 | 20 | 5 |
| Dec. 19 | 225 | 10 | 114.0 |  | 10 | 10 |  |
| Dec. 21 | 230 | 5 | 115.5 | 5 |  | 40 | $\stackrel{5}{40}$ |
| Dec. 30 | 225 | 5 | 115.0 |  | 5 | 5 |  |

Table 31.-Wool top futures: Open contracts, volume of trading, and average price, daily, by futures, Sept. 1, 1936, to June 30, 1938-Continued

1937 MARCH FUTURE-Continued

| Date | Open contracts | Volume of trading | Average price per pound | Longs |  | Shorts |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Purchases | Sales | Purchases | Sales |
| Jan. ${ }^{1987}$ | ${ }_{1,000} \mathrm{lb}_{215}$ | ${ }^{1,000} \mathrm{lb}{ }_{\text {in }}$ | Cents <br> 118.0 | 1,000 lb. | $1,000 \mathrm{lb}$ io | $1,000 \mathrm{lb}$ i0 | 1,000 lb. |
| Jan. 6 | 195 | 25 | 120.0 | 5 | 25 | 20 |  |
| Jan. ${ }^{\text {Jan. }}$ | 175 | 15 | 120.0 |  | 10 | 15 | 5 |
| Jan. 11 | 175 | 10 | 120.2 |  |  | 10 | 10 |
| Jan. 12 | 150 | 35 | 120.3 |  | 25 | 35 | 10 |
| Jan. 13. | 110 | 40 | 120.0 |  | 40 | 40 |  |
| Jan. 14 | 110 | 20 | 119.5 |  |  | 20 | 20 |
| Jan. 22 | 125 | 35 | 115.7 | 25 | 10 | 10 | 25 |
| Jan. 27 | 125 | 5 | 112.0 | 5 | ${ }^{5}$ |  |  |
| Feb. 2 | 115 | 10 | 108.0 |  | 10 | 10 | ------- |
| Feb. 4 | 95 | 20 | 108.2 |  | 20 | 20 | -----....- |
| Feb. 8 | 90 | 5 | 107.0 |  | 5 | 5 | --------- |
| Feb. 19 | 90 | 20 | 111.0 | 20 | 20 |  |  |
| Feb. 24 | 65 | 30 | 107.5 | 5 | 30 | 25 | --------- |
| Feb. 26 | 60 | 5 | 110.0 |  | 5 | 5 |  |
| Mar. 1 | 50 | 10 | 109.5 |  | 10 | 10 |  |
| Mar. ${ }^{\text {M }}$ | 50 50 | 5 5 | 109.0 109.0 | 5 | 5 | 5 | 5 |
| Mar. 10 | 45 | 15 | 113.5 | 10 | 15 | 5 |  |
| Mar. 12 |  | 45 | 110.0 |  | 45 | 45 |  |
| Total |  | 1,325 |  | 485 | 785 | 840 | 540 |
| Average |  |  | 105.2 |  |  |  |  |

1837 APRIL FUTURE

| 1986 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nov. 24 | 15 | 15 | 114.1 | 15 |  |  | 15 |
| Dec. 8 | 45 | 30 | 108.6 | 30 |  |  | 30 |
| Dec. 9 | 45 | 5 | 108.5 | 5 | 5 |  |  |
| Dec. 21.--------------- | 50 | 5 | 115.8 | 5 |  |  | 5 |
| 1987 |  |  |  |  |  |  |  |
| Jan. 23------------ | 50 | 5 | 120.0 |  | -- | 5 | 5 |
| Feb. 1 | 55 | 10 | 110.8 | 5 |  | 5 | 10 |
| Feb. 4 | 50 | 5 | 108.0 |  | 5 | 5 |  |
| Feb. 6 | 50 | 5 | 111.0 |  | -- | 5 | 5 |
| Feb. 16 | 50 | 5 | 104.0 |  |  | 5 | 5 |
| Mar. 18. | 45 | 5 | 118.5 | - | 5 | 5 |  |
| Mar. 25 | 35 | 10 | 118.0 |  | 10 | 10 |  |
| Mar. 30 | 15 | 30 | 113.7 | 5 | 25 | 25 | 5 |
| Apr. 21. | 10 | 5 | 118.0 |  | 5 | 5 |  |
| Apr. 23------------- |  | 10 | 113.8 |  | 10 | 10 |  |
| Total |  | 145 |  | 65 | 65 | 80 | 80 |
| A verage.----- |  |  | 112.6 |  | -- | -- |  |

1937 MAY FUTURE

| 1936 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sept. 1---- | 85 | 5 | 97.5 | 5 | 5 |  |  |
| Sept. 5----- | 85 | 5 | 96.9 | 5 | 5 |  |  |
| Sept. 9 | 175 | 90 | 96.8 | 90 |  |  | 90 |
| Sept. 12 | 175 | 5 | 96.5 | 5 | 5 | ----------- | -- |
| Sept. 21 | 175 | 5 | 95.5 | 5 | 5 |  |  |
| Sept. 22 | 180 | 5 | 95.5 | 5 |  |  | 5 |
| Sept. 23 | 190 | 10 | 94.5 | 10 |  |  | 10 |
| Oct. 3 | 190 | 5 | 95.5 | 5 | 5 |  | ---------- |
| Oct. 5 | 190 | 5 | 95.5 | 5 | 5 |  | ---------- |
| Oct. 6 | 190 | 5 | 95.8 | 5 | 5 | ---------. |  |
| Oct. 10 | 190 | 5 | 96. 0 | 5 | 5 | -.---------- | -- |
| Oct. 13 | 190 | 15 | 97.0 | 15 | 15 |  |  |
| Oct. 15 | 190 | 5 | 98.0 |  |  | 5 | 5 |
| Oct. 17. | 190 | 5 | 98.0 | 5 | 5 |  |  |
| Oct. 19 | 190 | 5 | 98.0 | 5 | 5 |  | ---------- |
| Oct. 20 | 190 | 5 | 98.2 | 5 | 5 |  | - |
| Oct. 22 | 190 | 5 | 98.5 | 5 | 5 |  | - |
| Oct. 24...... | 190 | 5 | 99.0 | 5 | 5 |  |  |

Table 31.-Wool top futures: Open contracts, volume of trading, and average price, daily, by futures, Sept. 1, 1936, to June 30, 1938-Continued

1937 MAY FUTURE-Continued

| Date | Open contracts | Volume of trading | A verage price per pound | Longs |  | Shorts |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Purchases | Sales | Purchases | Sales |
| $1936$ | 1,000 lb. ${ }_{190}$ | 1,000 lb. ${ }_{5}$ | Cents | 1,000 lb. ${ }_{5}$ | 1,000 lb. ${ }_{5}$ | 1,000 lb. | 1,000 lb. |
| Oct. 29------- | 190 | ${ }_{2}^{5}$ | 189.0 99.5 |  | 5 | 25 | 25 |
| Oct. 30-- | 175 | 25 | 100.0 | 10 | 25 | 15 |  |
| Nov. 4 | 175 | 15 | 101.5 | 15 | 15 |  |  |
| Nov. 5 | 175 | 10 | 103.0 |  |  | 10 | 10 |
| Nov. 6 | 225 | 50 | 104.5 | 50 |  |  | 50 |
| Nov. 7 | 235 285 | 10 50 | 104.4 105.9 | $\begin{aligned} & 10 \\ & 50 \end{aligned}$ |  |  | 10 50 |
| Nov. 10. | 295 | 40 | 105.3 | 40 | 30 |  | 10 |
| Nov. 12 | 305 | 15 | 106.0 | 10 |  | 5 | 15 |
| Nov. 13-- | 340 | 60 | 109.1 | 40 | 5 | 20 | 55 |
| Nov. 14 <br> Nov. 16 | 365 <br> 370 | 25 15 | 109.0 107.5 | 25 |  | 10 | 25 15 |
| Nov. 17 | 380 | 10 | 109.8 | 10 |  | 10 | 15 |
| Nov. 19.- | 400 | 30 | 111.6 | 25 | 5 | 5 | 25 |
| Nov. 20 | 385 | 85 | 110.6 | 30 | 45 | 55 | 40 |
| Nov. 21 | 385 | 5 | 109.5 |  |  | 5 | 5 |
| Nov. 23-- | 385 | 45 | 109.9 | 10 | 10 | 35 | 35 |
| Nov. ${ }^{\text {Nov. }}$ 25-- | 385 <br> 395 | 5 | 107.9 112.6 | 5 25 | ${ }_{15}^{5}$ |  | 10 |
| Nov. 30-- | 395 | 10 | 110.0 | 10 | 10 |  |  |
| Dec. 1 | 430 | 35 | 109.8 | 35 |  |  | $\overline{35}$ |
| Dec. 5 - | 435 | 35 | 110.7 | 20 | 15 | 15 | 20 |
| Dec. 8 | 440 | 10 | 107.8 | 10 | 5 |  | 5 |
| Dec. 12 | 435 435 | 25 5 | 108.0 | 10 5 | 25 | 5 |  |
| Dec. 15 | 435 | 10 | 108.5 | 10 | 10 |  |  |
| Dec. 16 | 435 | 5 | 110.0 | 5 | 5 |  |  |
| Dec. 17- | 425 | 30 | 111.4 | 5 | 15 | 25 | 15 |
| Dec. 18 | 425 | 15 | 111.0 | 15 | 15 |  |  |
| Dec. 21 | 425 | 5 | 115.5 | 5 | 5 |  |  |
| Dec. 23 | 420 | 10 | 112.8 | ${ }_{5}^{5}$ | 10 | 5 |  |
| Dec. 31--- | 420 | 10 | 115.8 | 10 | 10 |  |  |
| 1937 |  |  |  |  |  |  |  |
| Jan. 4----.- | 420 | 10 | 117.0 | 10 | 10 |  |  |
| Jan. $71 .--$ | 420 430 | 25 10 | 118.0 |  |  | 25 | ${ }_{10}^{25}$ |
| Jan. 12- | 430 | 10 | 122.0 | 10 | 10 |  | 10 |
| Jan. 14- | 435 | 15 | 120.0 | 10 | 5 | 5 | 10 |
| Jan. 15-- | 430 | 15 | 116. 2 |  | 5 | 15 | 10 |
| Jan. 18-- | 430 | 40 | 116.5 | 30 | 30 | 10 | 10 |
| Jan. 22 | 420 | 10 | 116.0 |  | 10 | 10 |  |
| Jan. ${ }^{23}$ | 415 | 5 | 117.0 |  | 5 | 5 |  |
| Jan. 25-- | 425 | 15 | 114.2 |  |  | 5 | 15 |
| Feb. 26 | 425 | 10 25 | 114.0 | 10 | 10 |  | 25 |
| Feb. 3 | 440 | 25 | 109.6 |  | 10 | 25 | 15 |
| Feb. 5 | 440 | 5 | 112.0 | 5 | 5 |  |  |
| Feb. 6 | 440 | 5 | 112.0 | 5 | 5 |  |  |
| Feb. 8 | 450 | 30 | 110.0 | 15 25 | ${ }^{5}$ | 15 | 25 |
| Feb. 11 | 470 | 25 5 | 110.0 | $\stackrel{5}{5}$ |  |  | 15 |
| Feb. 13 | 465 | 5 | 105.5 |  | 5 | 5 |  |
| Feb. 15 | 525 | 60 | 110.0 | 60 |  |  | 60 |
| Feb. 16 | 525 | 10 | 107.5 |  |  | 10 | 10 |
| Feb. 17 | 525 | 10 | 108.0 | -----1-- |  | 10 | 10 |
| Feb. 18- | 515 | 10 | 106.3 |  | 10 | 10 |  |
| Feb. 19-- | 505 | 10 | 105.5 |  | 10 | 10 |  |
| Feb. ${ }_{\text {Mar. }}{ }^{\text {F-- }}$ | 500 | 10 | 106.5 |  | 5 | 10 | 10 |
| Mar. 6 | 490 | 10 | 113.0 |  | 10 | 10 |  |
| Mar. 8 | 485 | 5 | 114.0 |  | 5 | 5 |  |
| Mar. 11 | 470 | 15 | 112.8 |  | 15 | 15 |  |
| Mar. 12 | 465 | 10 | 112.0 |  | 5 | 10 | 5 |
| Mar. 13 | 465 | 5 | 116.0 |  |  | 5 | 5 |
| Mar. 15 | 460 | 15 | 114.0 |  | 5 | 15 | 10 |
| Mar. 16 | 460 | 15 | 117.0 | 10 | 10 | 5 | 5 |
| Mar. 17 | 455 | 10 | 114.0 |  | 5 | 10 | 5 |
| Mar. ${ }_{\text {Mar }}{ }^{\text {22 }}$ | 425 | 35 10 | 1115. 1 |  | $\begin{array}{r}30 \\ 5 \\ \hline\end{array}$ | 35 10 | 5 5 |
| Mar. 24 | 410 | 30 | 115.7 |  | 10 | 30 | 20 |
| Mar. 25... | 410 | 10 | 118.0 |  |  | 10 | 10 |
| Mar. 31. - | 405 | 10 | 116.0 | ------ | 5 | 10 | 5 |

Table 31.-Wool top futures: Open contracts, volume of trading, and average price, daily, by futures, Sept. 1, 1936, to June 30, 1938—Continued

1937 MAY FUTURE-Continued

| Date | Open contracts | Volume of trading | Average price per pound | Longs |  | Shorts |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Purchases | Sales | Purchases | Sales |
| 1937 | 1,000 lb | 1,000 lb. | Cents | 1,000 lb. | 1,000 lb. | 1,000 lb. | 1,000 lb. |
| Apr. | 370 360 | 10 | 113.5 |  | 35 10 | 35 |  |
| Apr. 6 | 350 | 10 | 118.5 |  | 10 | 10 |  |
| Apr. 13 | 330 | 20 | 118.2 |  | 20 | 20 |  |
| Apr. 16 | 290 | 40 | 110.0 |  | 40 | 40 |  |
| Apr. 17 | 280 | 10 | 115.5 |  | 10 | 10 |  |
| Apr. 20 | 265 | 15 | 108.0 |  | 15 | 15 |  |
| Apr. 21 | 260 | 5 | 117.0 |  | 5 | 5 |  |
| Apr. 26 | 255 | 5 | 116.0 |  | 5 | 5 |  |
| Apr. 27 | 145 | 140 | 113.8 | 30 | 140 | 110 |  |
| Apr. 28 | 145 | 10 | 113.4 |  |  | 10 | 10 |
| May 4 | 145 | 10 | 108.0 |  |  | 10 | 10 |
| May 5 | 125 | 20 | 108.0 |  | 20 | 20 |  |
| May 7 | 115 | 15 | 110.7 | 5 | 15 | 10 |  |
| May 15 | 115 | 10 | 107.0 |  |  | 10 | 10 |
| May 18 | 95 | 20 | 107.0 |  | 20 | 20 |  |
| May 20 | 65 | 35 | 107.4 |  | 30 | 35 | 5 |
| May 21 |  | 75 | 108.8 |  | 65 | 75 | 10 |
| Total |  | 2,020 |  | 985 | 1,070 | 1,035 | 950 |
| A verage |  |  | 109.5 |  |  |  |  |

1937 JUNE FUTURE

| 1936 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nov. 10.- | 5 | 5 | 106.0 | 5 |  |  | 5 |
| Dec. 16 | 30 | 25 | 114.0 | 25 |  |  | 25 |
| Dec. 19 | 45 | 15 | 110.0 | 15 |  |  | 15 |
| Dec. 31 | 70 | 25 | 115.0 | 25 |  |  | 25 |
| 1937 |  |  |  |  |  |  |  |
| Jan. 12 | 60 | 25 | 118.5 | 15 | 25 | 10 |  |
| Jan. 27 | 55 | 5 | 111.0 |  | 5 | 5 |  |
| Mar. 16 | 45 | 25 | 116.0 | 15 | 25 | 10 |  |
| Apr. 27 | 35 | 10 | 114.0 |  | 10 | 10 |  |
| May 11 | 30 | 15 | 111.0 |  | 5 | 15 | 10 |
| June 3 | 20 | 15 | 109.5 | 5 | 15 | 10 |  |
| June 7 | 15 | 5 | 107.0 |  | 5 | 5 |  |
| June 9 | 15 | 10 | 107.0 |  |  | 10 | 10 |
| June 23 | 5 | 10 | 105.0 |  | 10 | 10 |  |
| June 24 |  | 5 | 105.0 |  | 5 | 5 |  |
| Total |  | 195 |  | 105 | 105 | 90 | 90 |
| Averag |  |  | 112.6 |  |  |  |  |

1937 JULY FUTURE


Table 31.-Wool top futures: Open contracts, volume of trading, and average price, daily, by futures, Sept. 1, 1936, to June 30, 1938-Continued

1937 JULY FUTURE-Continued

| Date | Open con-tracts | Volume of trading | A verage price per pound | Longs |  | Shorts |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Purchases | Sales | Purchases | Saies |
| $193 \overline{6}$ | 1,000 15. | ${ }_{1,000} \mathrm{lb}{ }_{\text {i }}$ | Cents | $1,000 \mathrm{lb}{ }_{\text {i5 }}$ | 1,000 lb. | 1,090 lb. | 1,000 lb. |
| Dec. 19----- | 810 | ${ }_{35}$ | 110.0 | $\begin{aligned} & 15 \\ & 35 \end{aligned}$ |  |  | 15 35 |
| Dec. 21 | 835 | 25 | 110.0 | 25 |  |  | ${ }_{25}$ |
| Dec. 22 | 860 | 30 | 113.4 | 30 | 5 |  | 25 |
| Dec. 24 | 875 | 15 | 113.0 | 15 |  |  | 15 |
| Dec. 28 | 875 | 5 | 113.0 | 5 | 5 |  |  |
| Dec. 29 | 875 | 5 | 113.5 | 5 | 5 |  |  |
| Dec. 30 | 875 | 5 | 111.0 | 5 | 5 |  |  |
| 1987 |  |  |  |  |  |  |  |
| Jan. 4------- | 830 865 | 70 35 | 116.0 | 20 35 | 65 | 50 | ${ }_{3}^{5}$ |
| Jan. 6 | 865 | 50 | 116.5 | 50 | 50 |  |  |
| Jan. 7 | 960 | 110 | 116.8 | 105 | 10 | 5 | 100 |
| Jan. 8 | 1,020 | 60 | 117.0 | 60 |  |  | 60 |
| Jan. 9 | 1,055 1,090 | 45 | 117.5 | 45 | 10 |  | 35 |
| Jan. 12- | 1,095 | 15 | 117.5 | 15 | 10 |  | 35 5 |
| Jan. 13 | 1,095 | 50 | 119.0 | 50 | 50 |  |  |
| Jan. 14- | 1,135 | 45 | 118.7 | 45 | 5 |  | 40 |
| Jan. 15 | 1,140 | 5 | 118.0 | 5 |  |  | 5 |
| Jan. 16 | 1,175 | 35 | 115.5 | 35 |  |  | 35 |
| Jan. 18 | 1,155 | 45 | 114.0 | 10 | 30 | 35 | 15 |
| Jan. 19 | 1,155 | 15 | 113.0 |  |  | 15 | 15 |
| Jan. 20 | 1,155 | 5 40 | 114.5 |  |  | 5 | 5 |
| Jan. 22 | 1,165 | 40 50 | 115.0 | 40 | 30 50 | 50 | 10 |
| Jan. 25 | 1,110 | 20 | 111.2 | 10 | 15 | 10 | 5 |
| Jan. 26 | 1,105 | 15 | 110.8 |  | 5 | 15 | 10 |
| Jan. 27 | 1,085 | 20 | 110.2 |  | 20 | 20 |  |
| Jan. 28 | 1,110 | 40 | 112.5 | 25 |  | 15 | 40 |
| Jan. ${ }^{29}$ | 1,110 | 5 5 | 113.0 113.0 | 5 | 5 |  | 5 |
| Feb. 2 | 1,160 | 50 | 113.5 | 50 |  |  | 50 |
| Feb. 3 | 1,155 | 25 | 108.9 |  | 5 | 25 | 20 |
| Feb. 5 | 1,155 | 5 | 108.3 | 5 | 5 |  |  |
| Feb. 6 | 1,160 | 10 | 111.0 | 10 | 5 |  | 5 |
| Feb. 9 | 1,150 | 55 | 107.8 | 30 | 40 | 25 | 15 |
| Feb. 11 | 1,160 1,160 | 15 10 | 108.3 | 15 | 5 | 10 | 10 |
| Feb. 13 | 1,280 | 120 | 108.5 | 120 |  |  | 120 |
| Feb. 15 | 1,290 | 10 | 107.0 | 10 |  |  | 10 |
| Feb. 16 | 1,290 | 25 | 105. 2 | 5 | 5 | 20 | 20 |
| Feb. 17 | 1,285 | 50 | 106.7 | 25 | 30 | 25 | 20 |
| Feb. 19 | 1,275 | 10 | 108. 2 |  | 10 | 10 |  |
| Feb. 20 | 1,275 | 5 15 | 108.5 110.5 | 5 | 5 5 | 15 | 10 |
| Feb. 24 | 1,260 | 10 | 109.0 |  | 10 | 10 |  |
| Feb. 25 | 1,260 | 25 | 110.0 |  |  | 25 | 25 |
| Feb. 26 | 1,265 | 15 | 109.7 | 15 | 10 |  | 5 |
| Feb. 27 | 1,265 | 5 | 109.0 | 5 | 5 |  |  |
| Mar. ${ }^{\text {Mar. }}$ | 1,265 | 5 | 109.0 |  | 5 | 5 | 5 |
| Mar. 5. | 1,265 | ${ }_{5}^{5}$ | 110.0 | 5 | 5 |  |  |
| Mar. 6 | 1,265 | 5 | 111.5 | 5 | 5 |  |  |
| Mar. 8 | 1,270 | 10 | 111.2 | 10 | 5 |  | 5 |
| Mar. 9 | 1,270 | 5 | 112.5 | 5 | 5 |  |  |
| Mar. 10 | 1,265 | 5 | 111.0 |  | 5 | 5 |  |
| Mar. 13 | 1,270 1,240 | 15 40 | 114.2 | 15 | 10 30 | 40 | 5 |
| Mar. 16 | 1,245 | 10 | 117.5 | 10 | 5 |  |  |
| Mar. 17. | 1,250 | 10 | 116.8 | 10 | 5 |  | 5 |
| Mar. 18. | 1,245 | 10 | 116. 0 |  | 5 | 10 |  |
| Mar. 24 | 1,165 | 90 | 117.4 |  | 80 | 90 | 10 |
| Mar. 29-- | 1,165 | 5 | 117.5 | 5 | 5 |  |  |
| Mar. 30 | 1,165 | 10 | 117.8 | 10 | 10 |  |  |
| Mar. 31 | 1,165 | 15 | 118.0 | 15 | 15 |  |  |
| Apr. 1 | 1,165 | 30 | 118.0 | 20 | 20 | 10 | 10 |
| Apr. 2 | 1,160 | 30 | 118.8 | 15 | 20 | 15 | 10 |
| Apr. 7. Apr. | 1,125 1,080 | 60 45 | 114.3 |  | 35 45 | 60 45 | 25 |
| Apr. 9 | 1,055 | 30 | 109.9 | 5 | 30 | 25 |  |
| Apr. 12 | 1,050 | 5 | 116.1 |  | 5 | 5 |  |
| Apr. 14 | 1,050 | 5 | 109. 6 | 5 | 5 |  |  |
| Apr. ${ }^{\text {Apr. }} 16$ | 1,025 1,025 | 25 10 | 116.0 | 10 | 25 10 | 25 |  |

Table 31.-Wool top futures: Open contracts, volume of trading, and average price, daily, by futures, Sept. 1, 1936, to June 30, 1938-Continued

1937 JULY FUTURE-Continued

| Date | Open contracts | Volume of trading | Average price per pound | Longs |  | Shorts |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Purchases | Sales | Purchases | Sales |
| 1937 | 1,000 lb. | 1,000 lb. | Cents | 1,000 lb. | 1,000 lb. | 1,000 lb. | 1,000 lb |
| Apr. 17 | 1,005 | 45 | 113.1 |  | 20 | 45 |  |
| Apr. 19 | 1,000 | 5 | 114.0 |  | 5 | 5 |  |
| Apr. 20 | 985 | 20 | 109.9 | 5 | 20 | 15 |  |
| Apr. 26 | 900 | 85 | 115.0 |  | 85 | 85 |  |
| Apr. 27 | 840 | 85 | 110.4 |  | 60 | 85 | 25 |
| Apr. 28 | 790 | 70 | 110.3 |  | 50 | 70 | 20 |
| Apr. 29 | 785 | 15 | 111.6 |  | 5 | 15 | 10 |
| Apr. 30 | 800 | 120 | 111.0 | 30 | 15 | 90 | 105 |
| May 1 | 795 | 15 | 111.0 |  | 5 | 15 | 10 |
| May 4 | 795 | 10 | 111.0 |  |  | 10 | 10 |
| May 6 | 780 | 15 | 112.3 | -------- | 15 | 15 |  |
| May 8 | 780 | 5 | 112.0 |  |  | 5 | 5 |
| May 11 | 785 | 30 | 111.2 | 5 |  | 25 | 30 |
| May 12 | 770 | 40 | 109.2 |  | 15 | 40 | 25 |
| May 13 | 770 | 15 | 109.0 |  |  | 15 | 15 |
| May 14 | 770 | 5 | 108.0 |  |  | 5 | 5 |
| May 15 | 755 | 25 | 107.5 |  | 15 | 25 | 10 |
| May 21 | 725 | 30 | 107.3 |  | 30 | 30 |  |
| May 24 | 715 | 10 | 110.0 |  | 10 | 10 |  |
| May 27 | 710 | 5 | 109.0 |  | 5 | 5 |  |
| May 28 | 690 | 20 | 109.0 |  | 20 | 20 |  |
| June 7 | 680 | 10 | 112.5 |  | 10 | 10 |  |
| June 8. | 680 | 5 | 111.0 |  |  | 5 | 5 |
| June 9 | 680 | 5 | 110.5 |  |  | 5 | 5 |
| June 10 | 655 | 45 | 109.0 | 5 | 30 | 40 | 15 |
| June 14 | 645 | 10 | 108.1 |  | 10 | 10 |  |
| June 16 | 635 | 25 | 109.5 | 15 | 25 | 10 |  |
| June 17 | 635 | 5 | 108.3 | 5 | 5 |  |  |
| June 18. | 630 | 5 | 108. 6 |  | 5 | 5 |  |
| June 21 | 630 | 5 | 108.1 | 5 | 5 |  |  |
| June 22 | 580 | 55 | 108. 6 | 5 | 55 | 50 |  |
| June 23 | 460 | 125 | 108.6 | 5 | 125 | 120 |  |
| June 24 | 455 | 65 | 109.0 |  | 5 | 65 | 60 |
| June 25 | 40 | 440 | 107.4 | 25 | 440 | 415 |  |
| July 8 | 40 | 40 | 110.4 |  |  | 40 | 40 |
| July 9 | 65 | 25 | 110.0 | 25 |  |  | 25 |
| July 14 | 40 | 25 | 110.0 |  | 25 | 25 |  |
| July 16 | 50 | 10 | 111.0 | 10 |  |  | 10 |
| July 20 |  | 60 | 111.0 | 5 | 55 | 55 | 5 |
| Total |  | 4,330 |  | 2,115 | 2, 135 | 2, 215 | 2,195 |
| Average |  |  | 111.5 | ---------- |  |  |  |

1937 AUGUST FUTURE

| 1936 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nov. 4 | 50 | 50 | 103.0 | 50 |  | -- | 50 |
| Nov. 5 | 100 | 50 | 103.0 | 50 |  |  | 50 |
| Dec. 4 | 100 | 5 | 108.5 |  |  | 5 | 5 |
| Dec. 10 | 100 | 25 | 107.5 |  |  | 25 | 25 |
| Dec. 23 | 150 | 50 | 113.0 | 50 |  |  | 50 |
| Dec. 30 | 150 | 5 | 110.0 | 5 | 5 |  |  |
| 1937 |  |  |  |  |  |  |  |
| Jan. 21 | 160 | 10 | 115.0 | 10 |  |  | 10 |
| Feb. 3. | 160 | 5 | 108. 0 |  |  | 5 | 5 |
| Apr. 5 | 150 | 10 | 118.6 |  | 10 | 10 | - |
| Apr. 8 | 145 | 5 | 109.0 |  | 5 | 5 | -- |
| Apr. 9 | 120 | 45 | 109.2 | 20 | 45 | 25 |  |
| Apr. 20 | 140 | 25 | 114.0 | 25 | 5 |  | 20 |
| Apr. 27 | 140 | 50 | 111.5 | 25 | 25 | 25 | 25 |
| Apr. 28 | 130 | 10 | 108.5 |  | 10 | 10 | -- |
| Apr. 29 | 115 | 15 | 108.0 |  | 15 | 15 | . |
| July 28 | 50 | 65 | 110.8 |  | 65 | 65 | -- |
| July 30 |  | 50 | 111.5 |  | 50 | 50 | - |
| Aug. 5 |  | 5 | 110.5 | 5 | 5 |  |  |
| Aug. 21 | 5 | 5 | 109.5 | 5 |  |  | 5 |
| Aug. 23- | 10 | 5 | 109.5 | 5 |  |  | 5 |
| Aug. 25 |  | 10 | 108.5 |  | 10 | 10 |  |
| Total |  | 500 |  | 250 | 250 | 250 | 250 |
| Averag |  |  | 109.4 |  |  |  |  |

Table 31.-Wool top futures: Open contracts, volume of trading, and average price, daily, by futures, Sept. 1, 1936, to June 30, 1938-Continued

1937 SEPTEMBER FUTURE

| Date | Open contracts | Volume of trading | Arerage price per pound | Longs |  | Shorts |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Purchases | Sales | Purchases | Sales |
| Nov. 25 | $1,000 \mathrm{lb} .$ | $1,000 \mathrm{lb} .$ | Cents 113.0 | 1,000 lb. ${ }_{\text {c }}$ | 1,000 lb. | 1,000 lb. | $1,000 \mathrm{lb} .$ $50$ |
| Jan. ${ }^{1937}$ | 60 | 10 | 117.0 | 10 |  |  | 10 |
| Jan. 21 | 65 | 5 | 115.0 | 5 |  |  | 5 |
| Mar. 8 | 80 | 15 | 111.8 | 15 |  |  | 15 |
| Mar. 23 | 70 | 10 | 116.0 |  | 10 | 10 |  |
| Mar. 24 | 95 | 30 | 116.5 | 25 |  | 5 | 30 |
| Apr. ${ }^{\text {Apr. }}$ | 90 85 | 5 5 | 118.6 |  | 5 | 5 |  |
| Apr. 8 | 80 | 5 | 114.0 |  | 5 | 5 |  |
| Apr. 9 | 60 | 50 | 114.5 | 30 | 50 | 20 |  |
| Apr. 19 | 60 | 5 | 113.0 | 5 | 5 |  |  |
| Apr. 28 | 60 | 20 | 112.4 |  |  | 20 | 20 |
| May 10 | 50 | 20 | 111.2 | 10 | 20 | 10 |  |
| July 14 | 50 | 5 | 110.3 | 5 | 5 |  |  |
| July 22 | 50 | 5 | 111.0 | 5 | 5 |  |  |
| Aug. 11 | 50 | 5 | 111.1 | 5 | 5 |  |  |
| Aug. 12- | 50 | 5 | 111. 1 | 5 | 5 |  |  |
| Aug. 14 | 50 55 | 5 | 110.5 | 5 | 5 |  | 5 |
| Sept. 2 |  | 55 | 106.5 |  | 55 | 55 | 5 |
| Total | --------- | 335 |  | 180 | 180 | 155 | 155 |
| A verage |  |  | 112.4 |  |  |  |  |

1937 OCTOBER FUTURE


Table 31.-Wool top futures: Open contracts, volume of trading, and average price, daily, by futures, Sept. 1, 1936, to June 30, 1938-Continued

1937 OCTOBER FUTURE-Continued

| Date | Open contracts | Volume of trading | Arerage price per pound | Longs |  | Shorts |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Purchases | Sales | Purchases | Sales |
| $1937$ | 1,000 lb. | 1,000 lb. | Cents | $1,000 \mathrm{lb} \text {. }$ | 1,000 lb. | 1,000 lb. | 1,000 lb. |
| Feb. 23------- | 1,155 | 10 | 110.5 |  |  | 5 | 10 |
| Feb. 24 | 1,160 | 5 | 109.0 | 5 |  |  | 5 |
| Feb. 26 | 1,185 | 55 | 109.6 | 35 | 10 | 20 | 45 |
| Mar. 1. | 1,195 | 10 | 109.5 | 10 |  |  | 10 |
| Mar. 2 | 1,200 | 5 <br> 5 | 109.0 | 5 |  | 5 | 5 5 |
| Mar. 4 | 1,225 | 25 | 110.0 | 25 |  |  | 25 |
| Mar. 5 - | 1,260 | 35 | 110.1 | 35 |  |  | 35 |
| Mar. 6 | 1,260 | 5 | 111.0 |  |  | 5 | 5 |
| Mar. 8 | 1,260 | 10 | 111.0 | 5 | 5 | , | 5 |
| Mar. 9 | 1,250 | 50 | 111.3 | 40 | 50 | 10 |  |
| Mar. 10 | 1,255 | 55 | 111.5 | 55 | 50 |  | 5 |
| Mar. 11 | 1,250 | 25 | 112.0 | 10 | 15 | 15 | 10 |
| Mar. 12 | 1,240 | 20 | 112.2 | 5 | 15 | 15 | 5 |
| Mar. 13 | 1,240 | 5 | 113.0 |  |  | 5 | 55 |
| Mar. 15- | 1,290 | 85 | 114.8 | 80 | 30 | 5 | 55 |
| Mar. 16 | 1,275 | 50 | 116.0 | 35 | 50 | 15 |  |
| Mar. 18 | 1,280 | 65 | 115.1 | 65 | 60 |  | 5 |
| Mar. 19. | 1,305 | 25 | 116. 0 | 25 |  |  | 25 |
| Mar. 20 | 1,310 | 5 | 116.5 | 5 |  |  | 5 |
| Mar. 22 | 1,310 | 20 | 116.0 | 20 | 20 |  |  |
| Mar. 23 | 1,255 | 65 | 116.0 |  | 55 | 65 | 10 |
| Mar. 24 | 1,255 | 40 | 116.4 | 20 | 20 | 20 | 20 |
| Mar. 25 | 1,270 | 15 | 117.0 | 15 |  |  | 15 |
| Mar. 27 | 1,320 | 60 | 117.0 | 60 | 10 |  | 50 |
| Mar. 29 | 1,375 | 55 | 117.0 | 55 |  |  | 55 |
| Mar. 30 | 1,385 | 10 | 117.0 | 10 |  |  | 10 |
| Mar. 31 | 1,380 | 5 | 117.0 |  | 5 | 5 |  |
| Apr. ${ }^{1}$ | 1,435 1,435 | 65 120 | 117.5 | 65 35 | 10 | 85 | 85 |
| Apr. 3 | 1,450 | 55 | 118.5 | 55 | 40 |  | 15 |
| Apr. 5 | 1,450 | 15 | 118.6 |  |  | 15 | 15 |
| Apr. 6 | 1,440 | 50 | 117.8 | 40 | 50 | 10 |  |
| Apr. 7 | 1,410 | 45 | 116.0 |  | 30 | 45 | 15 |
| Apr. 8 | 1,410 | 15 | 114.1 | 15 | 15 |  |  |
| Apr. 9 | 1,410 | 5 | 115.0 | 5 | 5 |  |  |
| Apr. 10 | 1,380 | 30 | 115.7 |  | 30 | 30 |  |
| Apr. 12 | 1,355 | 25 | 116.0 |  | 25 | 25 |  |
| Apr. 14 | 1,355 | 5 | 115.6 | 5 | 5 |  |  |
| Apr. ${ }^{15}$ | 1,345 | 40 | 115.3 | 15 | 25 | 25 | 15 |
| Apr. 16 | 1,340 | 10 | 114.5 |  | 5 | 10 | 5 |
| Apr. 17 | 1,335 | 15 | 114.5 | 10 | 15 | 5 |  |
| Apr. 19 | 1,330 | 15 | 113.8 |  | 5 | 15 | 10 |
| Apr. 22 | 1,330 | 25 | 114.5 |  |  | 25 | 25 |
| Apr. 23 | 1,335 | 5 | 115.0 | 5 |  |  |  |
| Apr. 24 | 1,340 | 5 | 115.0 | 5 |  |  |  |
| Apr. 26 | 1,345 | 25 | 114.6 | 5 |  | 20 | 25 |
| Apr. 27 | 1,355 | 25 | 113.0 | 25 | 15 |  | 10 |
| Apr. 28 | 1,510 | 310 | 112.4 | 155 |  | 155 | 310 |
| Apr. 29 | 1,510 | 40 | 110.2 | 75 | 5 30 | 35 70 | 35 115 |
| Apr. ${ }^{\text {May }} 1$ | 1,555 | 145 40 | 111.0 | 75 10 | 30 10 | 70 30 | 115 30 |
| May 3 | 1,555 | 30 | 111.0 |  |  | 30 | 30 |
| May 4 | 1,530 | 50 | 110.6 | 25 | 50 | 25 |  |
| May 5 | 1, 530 | 15 | 110.7 |  |  | 15 | 15 |
| May 6 | 1,530 | 5 | 111.1 | 5 | 5 |  |  |
| May 8 | 1,530 | 5 | 112.0 |  |  | 5 | 5 |
| May 10 | 1,540 | 10 | 111.5 | 10 |  |  | 10 |
| May 11 | 1,540 | 15 | 110.0 |  |  | 15 | 15 |
| May 13 | 1, 540 1,535 | 88 | 109.0 | 30 |  | 10 | 50 |
| May 15- | 1,530 | 30 | 107.3 |  | 5 | 30 | 25 |
| May 17 | 1,525 | 5 | 107.9 |  | 5 | 5 |  |
| May 19 | 1,525 | 10 | 107.5 | 10 | 10 |  |  |
| May 20 | 1,550 | 25 | 108. 0 | 25 |  |  | 10 |
| May 21 | 1,555 1,555 | 10 5 | 107.5 108.0 | 5 |  | 5 | 10 5 |
| May 24 | 1,555 | 5 | 108.0 | 5 | 5 |  |  |
| May 25 | 1. 525 | 30 | 107.0 |  | 30 | 30 |  |
| May 26 | 1,555 | 80 | 108.0 | 30 |  | 50 | 80 |
| June 2 | 1,480 | 50 | 109.1 | 5 | 50 | 45 |  |
| June 7 | 1,495 | 20 | 110.5 | 15 |  | 5 | 20 |
| June 9 | 1,495 1,515 | 20 | 111.0 109.9 | 20 | 10 |  | 20 |

Table 31.-Wool top futures: Open contracts, volume of trading, and aderage price, daily, by futures, Sept. 1, 1936, to June 30, 1938—Continued

1937 OCTOBER FUTURE-Continued

| Date | Open con-tracts | Volume of trading | Average price per pound | Longs |  | Shorts |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Purchases | Sales | Purchases | Sales |
| $\text { June } 10 \begin{aligned} & 1937 \\ & \hline \end{aligned}$ | 1,000 lb. | 1,000 lb. ${ }_{3}$ | Cents | 1,000 lb ${ }_{25}$ | 1,000 lb. | 1,000 lb. | 1,000 lb. |
| June 11-- | 1,540 | 10 | 107.6 |  |  | $\begin{aligned} & 10 \\ & 10 \end{aligned}$ | 35 |
| June 15- | 1,540 | 10 | 109.0 | 10 | 10 |  | 10 |
| June 16 | 1,540 | 15 | 109.0 | 10 | 10 | 5 | 5 |
| June 19 | 1,540 | 5 | 109.0 |  |  | 5 | 5 |
| June 21 | 1,540 | 5 | 109.0 |  |  | 5 | 5 |
| June 22 | 1,505 | 35 | 108.6 |  | 35 | 35 |  |
| June 24 | 1,460 | 45 | 109.0 |  | 45 | 45 |  |
| June 26 | 1,460 | 5 | 109.5 |  |  | 5 | 5 |
| July 2 - | 1,415 | $\stackrel{25}{25}$ | 109.5 | 5 | 25 | 25 |  |
| July 6 | 1, 405 | 20 | 111.5 |  | 10 | 20 | 10 |
| July 7 | 1,380 | 25 | 111.0 |  | 25 | 25 |  |
| July 8 | 1,380 | 15 | 110.2 | 5 | 5 | 10 | 10 |
| July 10 | 1,380 | 5 | 109.9 |  |  | 5 | 5 |
| July 12 | 2,370 | 10 | 110.5 |  | 10 | 10 |  |
| July 19 | 1,350 | 25 | 111.8 | 5 | 25 | 20 |  |
| July ${ }^{20}$ | 1,345 | 5 | 111.5 |  | 5 | 5 |  |
| July ${ }^{24}$ | 1,340 | 5 | 111.5 |  | 5 | 5 |  |
| July ${ }^{\text {July }}$ 28- | 1,300 | 40 | 112.7 |  | 40 | 40 |  |
| July 29 | 1,220 | 25 | 112.7 |  | 25 | 55 |  |
| July 30 | 1,165 | 55 | 112.7 |  | 55 | 55 |  |
| July 31 | 1,160 | 15 | 112.5 |  | 5 | 15 | 10 |
| Aug. 3-1 | 1,155 | 5 | 112.0 |  | 5 | 5 |  |
| Aug. 14 | 1,155 | 10 | 111.0 |  |  | 10 | 10 |
| Aug. 16 | 1,135 | 55 | 111.0 |  | 20 | 55 | 35 |
| Aug. 17 | 1,135 | 20 | 111.0 |  |  | 20 | 20 |
| Aug. 18 | 1,135 | 10 | 111.0 |  |  | 10 | 10 |
| Aug. 20-- | 1,145 | 10 | 110.0 | 10 |  | 10 | 10 |
| Aug. 23 | 1,145 | 5 | 109.0 |  |  | 5 |  |
| Aug. 24 | 1,145 | 10 | 109.2 |  |  | 10 | 10 |
| Aug. 26 | 1,145 | 10 | 110.0 | 10 | 10 |  |  |
| Aug. 27 | 1,145 | 5 | 109.0 | 5 | 5 |  |  |
| Aug. 30 | 1,145 | 5 | 109.0 |  |  | 5 |  |
| Sept. 2. | 1,110 | 25 | 107.0 |  | 25 | 25 |  |
| Sept. 7 | 1,100 | 10 | 105.0 |  | 10 | 10 |  |
| Sept. 8 | 1,090 | 30 | 104.4 |  | 10 | 30 | 20 |
| Sept. 11 | 990 | 100 | 105.0 |  | 100 | 100 |  |
| Sept. 13 | 985 | 80 | 104. 0 | 20 | 25 | 60 | 55 |
| Sept. 14. | 985 985 | 5 | 103.5 | 5 | 5 |  |  |
| Sept. 17 | 985 | 5 160 | 103.7 103.8 | 5 | 160 | 110 |  |
| Sept. 18-- | 845 | 40 | 103.8 | 10 | 40 | 30 |  |
| Sept. 20 | 835 | 10 | 103.4 |  | 10 | 10 |  |
| Sept. 21 | 790 | 55 | 103.3 | 10 | 55 | 45 |  |
| Sept. 22 | 785 | 5 | 103.0 |  | 5 | 5 |  |
| Sept. 23 | 695 | 175 | 103.6 | 85 | 175 | 90 |  |
| Sept. 24 | 675 | 20 | 103.0 |  | 20 | 20 |  |
| Sept. 25 | 675 | 10 | 102.5 | 10 | 10 |  |  |
| Sept. 27 <br> Sept. 28 | 675 660 | 25 25 | 101.6 101.4 | 20 10 | 20 25 | ${ }_{15}^{5}$ | 5 |
| Sept. 30 | 670 | 10 | 101.5 | 10 |  |  | 10 |
| Oct. 1. | 660 | 10 | 101.6 |  | 10 | 10 |  |
| Oct. 4 | 655 | 15 | 101.2 | 10 | 15 | 5 |  |
| Oct. 5- | 655 | 5 | 98.5 |  |  | 5 | 5 |
| Oct. 6 | 670 | 20 | 95.0 | 20 | 5 |  | 15 |
| Oct. 7 | 195 | 470 5 | ${ }_{95}^{95.5}$ |  | 470 | 470 5 |  |
| Oct. 11 | 195 | 5 | 94.0 | 5 | 5 |  |  |
| Oct. 19 | 115 | 95 | 93.8 | 15 | 95 |  |  |
| Oct. 21 | 30 | 85 | 90.3 |  | 85 | 85 |  |
| Oct. 22 |  | 45 | 92.0 |  | 30 | 45 | 15 |
| Total. |  | 6,435 |  | 3, 205 | 3,205 | 3, 230 | 3,230 |
| Averag |  |  | 109.4 |  |  |  |  |

Table 31.-Wool top futures: Open contracts, volume of trading, and average price, daily, by futures, Sept. 1, 1936, to June 30, 1938-Continued

1937 NOVEMBER FUTURE

| Date | Open contracts | Volume of trading | A verage price per pound | Longs |  | Shorts |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Purchases | Sales | Purchases | Sales |
| June 8------ | 1,000 lb. ${ }_{10}$ | ${ }^{1,000} \mathrm{lb} \mathrm{l}_{10}$ | $\begin{aligned} & \text { Cents } \\ & 111.0 \end{aligned}$ | 1,000 lb. | 1,000 lb. | 1,000 lb. | ${ }_{1,000} \mathrm{lb}_{10}$ |
| June 9 | 25 | 15 | 110.3 | 15 |  |  | 15 |
| Julv 15 | ${ }_{25}^{25}$ | 5 5 | 1111.0 | 5 | 5 |  |  |
| July 21 | 25 | 5 | 111.0 | 5 | 5 | - |  |
| Sept. 15. | 25 | 5 | 103.7 | 5 | 5 |  |  |
| Sept. ${ }^{16}$ | 30 | 10 | 105. 0 | 10 | 5 |  | 5 |
| Sept. ${ }^{23}$ | 25 | 5 | 104.0 |  | 5 | 5 |  |
| Oct. 6 | 15 | 10 | 95.4 |  | 10 | 10 |  |
| Oct. 9 | 15 | 10 15 | 95.0 | 10 | 10 |  |  |
| Nov. 5 |  | 15 | 85.0 |  | 15 | 15 |  |
| Total.. | ---------- | 95 | ----------- | 65 | 65 | 30 | 30 |
| Average | -------- |  | 102.1 |  |  |  |  |

1937 DECEMBER FUTURE

| 1937 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Feb. 4 | 20 | 20 | 111.5 | 20 |  |  | 20 |
| Feb. 27. | 20 | 35 | 110.0 |  |  | 35 | 35 |
| Mar. 3 | 20 | 5 | 110.0 | 5 | 5 |  |  |
| Mar. 4 | 20 | 20 | 110.1 |  |  | 20 | 20 |
| Mar. 8 | 35 | 25 | 111. 6 | 25 | 10 |  | 15 |
| Mar. 11 | 50 | 15 | 112.0 | 15 |  |  | 15 |
| Mar. 12 | 55 | 20 | 112.5 | 5 |  | 15 | 20 |
| Mar. 13 | 65 | 15 | 113.0 | 10 | --- | 5 | 15 |
| Mar. 15 | 75 | 15 | 114. 5 | 10 |  | 5 | 15 |
| Mar. 16 | 95 | 25 | 115.7 | 20 |  | 5 | 25 |
| Mar. 17 | 125 | 35 | 115.6 | 30 |  | 5 | 35 |
| Mar. 18 | 130 | 5 | 115.0 | 5 |  |  | 5 |
| Mar. 19 | 160 | 30 | 116.0 | 30 |  |  | 30 |
| Mar. 20 | 170 | 10 | 116.5 | 10 |  |  | 10 |
| Mar. 22 | 180 | 10 | 116.0 | 10 |  |  | 10 |
| Mar. 23 | 180 | 45 | 116.1 |  |  | 45 | 45 |
| Mar. 24 | 210 | 30 | 116.5 | 30 |  |  | 30 |
| Mar. 25 | 220 | 20 | 117.0 | 10 |  | 10 | 20 |
| Mar. ${ }^{7}{ }^{7}$ | 235 | 30 | 117.2 | 15 |  | 15 | 30 |
| Mar. 30 | 235 | 45 | 116.6 |  |  | 45 | 45 |
| Apr. 1 | 280 | 50 | 117.5 | 45 |  | 5 | 50 |
| Apr. 2 | 310 | 45 | 118. 4 | 45 | 15 |  | 30 |
| Apr. 3 | 305 | 5 | 118.5 |  | 5 | 5 |  |
| Apr. 7 | 315 | 10 | 116.0 | 10 |  |  | 10 |
| Apr. 8 | 335 | 35 | 114.5 | 35 | 15 |  | 20 |
| Apr. 9 | 335 | 5 | 115.2 | 5 | 5 |  |  |
| Apr. 10 | 335 | 10 | 116. 2 | 10 | 10 |  |  |
| Apr. 12 | 335 | 5 | 116.5 |  |  | 5 | 5 |
| Apr. 13 | 335 | 5 | 115.5 | 5 | 5 |  |  |
| Apr. 15 | 325 | 10 | 115.5 |  | 10 | 10 |  |
| Apr. 17 | 330 | 20 | 114.5 | 5 |  | 15 | 20 |
| Apr. 23 | 340 | 10 | 115.0 | 10 |  |  | 10 |
| Apr. 26 | 370 | 55 | 114.8 | 35 | 5 | 20 | 50 |
| Apr. 27 | 385 | 30 | 113.9 | 30 | 15 |  | 15 |
| Apr. 28 | 455 | 70 | 111.6 | 70 |  |  | 70 |
| Apr. 30 | 605 | 150 | 111.0 | 150 |  |  | 150 |
| May 1. | 605 | 10 | 111.0 |  |  | 10 | 10 |
| May 3 | 615 | 25 | 111.0 | 10 |  | 15 | 25 |
| May 5 | 615 | 5 | 111.0 |  |  | 5 | 5 |
| May 6 | 625 | 15 | 111.5 | 15 | 5 |  | 10 |
| May 12 | 625 | 5 | 110.0 | 5 | 5 5 |  |  |
| May 13. | 615 | 35 | 108.7 | 10 | 20 | 25 | 15 |
| May 14 | 625 | 40 | 108.0 | 20 | 10 | 20 | 30 |
| May 17 | 640 | 15 | 107. 0 | 15 |  |  | 15 |
| May 18 | 635 | 10 | 108. 0 |  | 5 | 10 | 5 |
| May 19 | 635 | 10 | 107.0 | 10 | 10 |  |  |
| May 20 | 655 | 45 | 107.8 | 45 | 25 |  | 20 |
| May 21 | 665 | 25 | 107.8 | 25 | 15 |  | 10 |
| May 22 | 665 | 5 | 107. 9 | 5 | 5 |  |  |
| May 24 | 670 | 10 | 107.8 | 5 |  | 5 | 10 |
| May 26 | 690 | 20 | 108.0 | 20 |  |  | 20 |
| May 27. | 685 | 55 | 108.0 | 5 | 10 | 50 | 45 |
| June 1-... | 685 | 10 | 108.5 | 10 |  | 10 | 10 |
| June 3 | 695 | 10 | 110.0 | 10 |  |  | 10 |

Table 31.-Wool top futures: Open contracts, volume of trading, and average price, daily, by futures, Sept. 1, 1936, to Junc 30, 1938-Continued

1937 DECEMBER FUTURE-Continued

| Date | Open contracts | Volume of trading | A verage price per pound | Longs |  | Shorts |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Purchases | Sales | Purchases | Sales |
| 1937 | 1,000 lb. | 1,000 lb. | Cents | 1,000 lb. | 1,000 lb. | 1,000 lb. | 1,000 lb. |
| June 4.-.-... | 680 695 | 15 20 | 110.0 | 15 |  | $\begin{array}{r} 15 \\ 5 \end{array}$ | 0 |
| June 8- | 695 | 25 | 110.7 | 10 | 10 | 15 | 15 |
| June 9 | 690 | 15 | 110.0 |  | 5 | 15 | 10 |
| June 11 | 705 | 15 | 108.0 | 15 |  |  | 15 |
| June 12 | 705 | 10 | 109.0 | 10 | 10 |  |  |
| June 14 | 705 | 15 | 108.5 |  |  | 15 | 15 |
| June 16-- | 710 | 5 | 108.6 | 5 |  |  | 5 |
| June 18-- | 710 710 | 5 <br> 5 | 108.6 108.5 |  |  | 5 | 5 5 |
| June 24 | 730 | 20 | 109.0 | 20 |  | 5 | ${ }_{20}^{5}$ |
| June 25. | 730 | 15 | 109.5 |  |  | 15 | 15 |
| June 28 | 730 | 5 | 109.5 |  |  | 5 | 5 |
| June 29. | 730 | 5 | 109.5 |  |  | 5 | 5 |
| July 6 -- | 715 | 45 | 111.8 | 5 | 20 | 40 | 25 |
| July 7 | 700 | 55 | 111.0 | 10 | 25 | 45 | 30 |
| July 12 | 700 | 5 | 110.1 |  |  | 5 | 5 |
| July July 23 | 700 | 5 20 | 110.1 | 5 |  | 5 | 5 20 |
| July 24 | 705 | 10 | 111.5 |  |  | 10 | 10 |
| July 26 | 705 | 25 | 112.0 |  |  | 25 | 25 |
| July 27. | 705 | 10 | 112.5 |  |  | 10 | 10 |
| July 28 | 705 | 40 | 112.7 |  |  | 40 | 40 |
| July 29 | 705 | 15 | 113.0 |  |  | 15 | 15 |
| July 30 | 700 | 5 | 112.5 |  | 5 | 5 |  |
| Aug. ${ }^{\text {2 }}$ | 710 | 15 | 112.0 | 15 | 5 |  | 10 |
| Aug. 3- | 710 | 30 15 | 112.5 111.5 |  |  | 30 15 | 30 |
| Aug. 6 | 710 | 10 | 111.5 |  |  | 10 | 10 |
| Aug. 9 | 660 | 50 | 112.5 |  | 50 | 50 |  |
| Aug. 19 | 650 | 10 | 111.0 |  | 10 | 10 |  |
| Aug. 20 | 625 | 45 | 110.1 | 10 | 35 | 35 | 10 |
| Aug. 21 | 620 | 10 | 110.0 |  | 5 | 10 | 5 |
| Aug. 23 | 610 | 25 | 109.5 |  | 10 | 25 | 15 |
| Aug. 24 | 610 | 10 | 109.5 |  |  | 10 | 10 |
| Aug. ${ }^{\text {ang }} 30$ | 605 620 | $\begin{array}{r}5 \\ 35 \\ \hline\end{array}$ | 109.5 |  | 5 | 5 |  |
| Aug. 31 | 630 | 25 | 108.3 | 10 |  | 15 | ${ }_{25}$ |
| Sept. ${ }^{\text {d }}$ | 610 | 45 | 107.2 |  | 20 | 45 | 25 |
| Sept. 2 | 610 | 25 | 107.1 |  |  | 25 | 25 |
| Sept. ${ }^{\text {3 }}$ | 610 | 15 | 107.0 |  |  | 15 | 15 |
| Sept. 7. | ${ }^{605}$ | 15 | 104.7 | 10 | 15 | 5 |  |
| Sept. 8 | 615 | 40 | 104.3 | 15 | 5 | 25 | 35 |
| Sept. 9 --- | 615 | 30 | 104.5 |  |  | 30 | 30 |
| Sept. $13-$ | ${ }_{615}^{620}$ | 15 | 104.0 | 5 | 5 | 10 | 15 10 |
| Sept. ${ }^{15}$ | 605 | 20 | 104.0 | 10 | 20 | 10 |  |
| Sept. 20 | 605 | 5 | 103.5 |  |  | 5 | 5 |
| Sept. ${ }^{21}$ | 605 | 10 | 103.5 |  |  | 10 | 10 |
| Sept. 22 | 605 | 10 | 103.5 |  |  | 10 | 10 |
| Sept. 23 | 540 | 145 | 104.1 | 80 | 145 | 65 |  |
| Sept. 25 | 530 | 10 | 103.0 |  | 10 | 10 |  |
| Sept. 28 | 530 | 10 | 102.0 |  |  | 10 | 10 |
| Sept. ${ }^{\text {Oct. }} 4$ | 535 530 | 15 | 102.5 101.9 | 10 | 5 5 | 5 15 | 10 10 |
| Oct. 6 | 490 | 55 | 95.8 |  | 40 | 55 | 15 |
| Oct. 8 | 480 | 15 | 95.5 | 5 | 15 | 10 |  |
| Oct. 11 | 475 | 10 | 95.0 |  | 5 | 10 | 5 |
| Oct. 13 | 455 | 45 | 95.5 |  | 20 | 45 | 25 |
| Oct. 14 | 455 | 30 | 95.0 |  |  | 30 | 30 |
| Oct. 15 | 475 | 60 | 95.2 | 25 | 5 | 35 | 55 |
| Oct. 16-- | 455 | 30 | 95.1 | 5 | 25 | 25 | 5 |
| Oct. 20 | 445 | 20 | 91.5 |  |  | 20 | 20 |
| Oct. 21 | 430 | 15 | 94.0 |  | 15 | 15 |  |
| Oct. 28 | 430 | 10 | 91.5 | 10 | 10 |  |  |
| Nov. 1 | 425 | 5 | 91.5 |  | 5 | 5 |  |
| Nov. 3 | 410 | 15 | 89.3 |  | 15 | 15 |  |
| Nov. 8 | 410 | 30 | 81.9 | 15 | 15 | 15 | 15 |
| Nov. 10 | 405 | 10 | 84.6 |  | 5 | 10 | 5 |
| Nov. 18 | 380 | 35 | 81.4 |  | 25 | 35 | 10 |
| Nov. $\mathrm{Nov}$. | 370 | 50 | 80.0 | 40 | 50 | 10 |  |
| Nov. ${ }^{\text {Nov. }}$ 29 | 145 | 230 | 75.5 | 5 | 230 | 225 |  |
| Nov. 29 | 145 | 50 | 81.0 |  |  | 50 | 50 |
| Nov. ${ }^{\text {Dec. }}$ | 140 90 | 5 50 | 80.0 80.5 |  | 5 50 | 5 |  |
| Dec. 1 --- | ¢ |  | 80.5 |  | 5 | 5 |  |

Table 31.-Wool top futures: Open contracts, volume of trading, and average price, 'daily, by futures, Sept. 1, 1936, to June 30, 1938-Continued

1937 DECEMBER FUTURE—Continued

| Date | Open contracts | Volume of trading | Average price per pound | Longs |  | Shorts |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Purchases | Sales | Purchases | Sales |
| Dec. 9 ${ }^{1937}$ | 1,000 lb. 85 | 1,000 lb. ${ }_{5}$ | Cents $85.0$ | 1,000 lb. | $1,000 \mathrm{lb}.{ }_{5}$ | $1,000 \mathrm{lb}$. | 1,000 lb. |
| Dec. 14 | 45 | 55 | 86.6 |  | 40 | 55 | 15 |
| Dec. 15 | 30 | 15 | 87.0 |  | 15 | 15 |  |
| Dec. 21 | 20 | 10 | 83.5 |  | 10 | 10 |  |
| Dec. 23 |  | 20 | 84.5 |  | 20 | 20 |  |
| Total |  | 3,370 |  | 1,285 | 1,285 | 2, 085 | 2,085 |
| A verage |  |  | 103.8 |  |  |  |  |

1938 JANUARY FUTURE


1938 FEBRUARY FUTURE


Table 31.-Wool top futures: Open contracts, volume of trading, and average price, daily, by futures, Sept. 1, 1936, to June 30, 1938-Continued

1938 MARCH FUTURE ${ }^{2}$

| Date | Open contracts | Volume of trading | Average price per pound | Longs |  | Shorts |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Purchases | Sales | Purchases | Sales |
| 1937 | 1,000 lb. | 1,000 lb. | Cents | 1,000 lb. | 1,000 lb. | 1,000 lb. | 1,000 lb. |
| Apr. 16--- | 10 | 10 | 114.0 | 10 |  |  | 10 |
| Apr. 22 | 10 | 5 | 114.5 | 5 | 5 |  |  |
| Apr. 23 | 35 | 25 | 114.5 | 25 |  |  | 25 |
| Apr. 24 | 85 | 50 | 114.5 | 50 |  |  | 50 |
| Apr. 26 | 130 | 45 | 115.0 | 45 |  |  | 45 |
| Apr. 27 ---- | 170 | 65 | 113.2 | 65 | 25 |  | 40 |
| Apr. 28 | 260 | 90 | 112.0 | 90 |  |  | 90 |
| Apr. 29 | 300 | 40 | 110.2 | 40 |  |  | 40 |
| Apr. 30 | 310 | 10 | 111.0 | 10 |  |  | 10 |
| May 4 | 330 | 20 | 110.5 | 20 |  |  | 20 |
| May 5 | 340 | 10 | 110.5 | 10 |  |  | 10 |
| May 7 | 340 345 | 15 | 111.5 |  |  | 15 | 15 |
| May 10 | 345 | 5 | 111.0 | 5 |  |  | 5 |
| May 11. | 360 | 15 | 110.3 | 15 |  |  | 15 |
| May 12 | 390 | 35 | 109.1 | 35 | 5 |  | 30 |
| May 13 | 410 | 25 | 109.0 | 25 | 5 |  | 20 |
| May 14 | 470 | 85 | 107.9 | 80 | 20 | 5 | 65 |
| May 15 | 470 | 10 | 107.0 | 10 | 10 |  |  |
| May 17 | 475 | 35 | 107.5 | 20 | 15 | 15 | 20 |
| May 18 | 505 | 35 | 107.9 | 35 | 5 |  | 30 |
| May 19 | 575 | 70 | 107. 2 | 70 |  |  | 70 |
| May 20 | 610 | 35 | 107.5 | 35 |  |  | 35 |
| May 21. | 610 | 5 | 107.0 | 5 | 5 |  |  |
| May 24 | 660 | 50 | 107.5 | 30 |  |  | 50 |
| May 25. | 665 | 15 | 107.5 | 15 | 10 |  | 5 |
| May 26 | 670 | 10 | 108.0 | 10 | 5 |  | 5 |
| May 27 | 660 | 70 | 108.0 |  | 10 | 70 | 60 |
| May 28 | 685 | 35 | 108. 1 | 30 | 5 | 5 | 30 |
| June 1 | 685 | 10 | 108.8 | 10 | 10 |  |  |
| June 2 | 740 | 65 | 109.0 | 65 | 10 |  | 55 |
| June 3 | 740 | 35 | 109.9 | 10 | 10 | 25 | 25 |
| June 4 | 755 | 25 | 110.0 | 15 |  | 10 | 25 |
| June 5 | 760 | 5 | 110.0 | 5 |  |  | 5 |
| June 7 | 760 | 5 | 110.0 | 5 | 5 |  |  |
| June 8 | 775 | 60 | 110.0 | 40 | 25 | 20 | 35 |
| June 9 | 800 | 30 | 109.5 | 30 | 5 |  | 25 |
| June 10 | 835 | 45 | 108.3 | 45 | 10 |  | 35 |
| June 11. | 840 | 5 | 108.5 | 5 |  |  | 5 |
| June 12 | 835 | 15 | 108. 7 | -.- | 5 | 15 | 10 |
| June 14 | 835 | 10 | 108.5 |  |  | 10 | 10 |
| June 15 | 835 | 40 | 108.9 | 10 | 10 | 30 | 30 |
| June 16 | 845 | 25 | 108.7 | 20 | 10 | 5 | 15 |
| June 17 | 845 | 5 | 109.0 | 5 | 5 |  |  |
| June 19 | 870 | 25 | 108.5 | 25 |  |  | 25 |
| June 25 | 855 | 40 | 109.6 |  | 15 | 40 | 25 |
| June 26 | 855 | 5 | 109.5 | 5 | 5 |  |  |
| June 30 | 855 | 25 | 109.5 |  |  | 25 | 25 |
| July 1 | 855 | 5 | 110.0 | 5 | 5 |  |  |
| July 2 | 835 | 25 | 110.0 | 5 | 25 | 20 |  |
| July 6 | 755 | 180 | 111.6 | 10 | 90 | 170 | 90 |
| July 7 -- | 745 | 50 | 111.0 | 10 | 20 | 40 | 30 |
| July 8.- | 725 | 65 | 110.2 | 25 | 45 | 40 | 20 |
| July 9 - | 700 | 50 | 110.0 |  | 25 | 50 | 25 |
| July 10 | 700 | 25 | 110.0 | 25 | 25 |  |  |
| July 13 | 700 | 15 | 110.0 | 15 | 15 |  |  |
| July 15 | 710 | 10 | 110.5 | 10 |  |  | 10 |
| July 16.-.. | 840 | 150 | 111.0 | 135 | 5 | 15 | 145 |
| July 19.--- | 835 | 5 | 111.5 |  | 5 | 5 |  |
| July 23. | 845 | 10 | 111.0 | 10 |  |  | 10 |
| July 24 | 865 | 20 | 111.0 | 20 |  |  | 20 |
| July 26-- | 895 | 50 | 112.0 | 50 | 20 |  | 30 |
| July 27---- | 895 | 40 | 112.0 |  |  | 40 | 40 |
| July 29..... | 955 | 70 | 112.5 | 70 | 10 |  | 60 |
| Aug. 2-... | 955 | 5 | 112.0 | 5 | 5 | ----------- |  |
| Aug. 4 | 970 | 25 | 111.1 | 20 | 5 | 5 | 20 |
| Aug. 5 | 990 | 50 | 111.0 | 20 |  | 30 | 50 |
| Aug. 6 | 1,000 | 10 | 111.0 | 10 |  |  | 10 |
| Aug. 7 | 1,005 | 55 | 111.3 | 5 |  | 50 | 55 |
| Aug. 9-- | 1,005 | 10 | 111.5 | 10 | 10 | --------- |  |
| Aug. 11 | 1,015 | 10 | 111.5 | 10 |  | ------------ | 10 |
| Aug. 12 | 1,020 | 5 | 111.0 | 5 |  |  | 5 |
| Aug. 13- | 1.045 | 40 15 | 110.9 110.5 | 35 5 | 10 | 10 | 30 15 |
| Aug. 14 | 1,050 | 15 | 110.5 | 5 |  | 10 | 15 |

${ }^{2}$ Includes 5,000 pounds of uncleared "curb" trades in November 1937 and 20,000 pounds in January 1938.

Table 31.-Wool top futures: Open contracts, volume of trading, and average price, daily, by futures, Sept. 1, 1936, to June 30, 1938-Continued

1938 MARCH FUTURE-Continued

| Date | Open contracts | Volume of trading | A verage price per pound | Longs |  | Shorts |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Purchases | Sales | Purchases | Sales |
| $\text { Aug. } 16{ }^{1937}$ | $\begin{aligned} & 1,000 \mathrm{lb} . \\ & 1.055 \end{aligned}$ | $1,000 \mathrm{lb} .$ | Cents <br> 110.5 | 1,000 lb. ${ }_{5}$ | 1,000 lb . | 1,000 lb. | 1,000 lb. |
| Aug. 17 | 1,055 | 25 | 110.5 |  |  | 25 | 25 |
| Aug. 19 | 1,100 | 95 | 110.0 | 45 |  | 50 | 95 |
| Aug. 23 | 1,110 | 15 | 109.3 | 15 | 5 |  | 10 |
| Aug. 24 | 1,115 | 15 | 109.0 | 10 | 5 | 5 | 10 |
| Aug. 25 | 1,115 | 45 | 109.7 |  |  | 45 | 45 |
| Aug. 28 | 1,115 | 10 | 109.3 |  |  | 10 | 15 |
| Aug. 30 | 1. 150 | 35 | 108.9 | 35 |  |  | 35 |
| Aug. 31 | 1,185 | 85 | 108.0 | 35 |  | 50 | 85 |
| Sept. 1 | 1,215 | 55 | 107.1 | 30 |  | 25 | 55 |
| Sept. 2 | 1,250 | 40 | 106.4 | 35 |  | 5 | 40 |
| Sept. 3 | 1,255 | 35 | 106.5 | 5 |  | 30 | 35 |
| Sept. 7 - | 1,280 | 45 | 104.5 | 25 |  | 20 | 45 |
| Sept. 8 | 1,285 | 50 | 104.0 | 5 |  | 45 | 50 |
| Sept. 9 | 1,285 | 15 | 103.8 | 5 | 5 | 10 | 10 |
| Sept. 10 | 1,285 | 35 | 104.5 |  |  | 35 | 35 |
| Sept. 11 <br> Sept. 13 | 1,290 1,350 | 30 120 | 104.5 103.6 | $\begin{aligned} & 25 \\ & 60 \end{aligned}$ | 20 | 5 60 | 120 |
| Sept. 14 | 1,365 | 15 | 103.5 | 15 |  |  | 15 |
| Sept. 15 | 1,430 | 80 | 103.9 | 80 | 15 |  | 65 |
| Sept. 16 | 1,450 | 55 | 104.4 | 25 | 5 | 30 | 50 |
| Sept. 17 | 1,600 | 210 | 103.8 | 210 | 60 |  | 150 |
| Sept. 18 | 1,620 | 30 <br> 35 | 103.8 | 30 10 | 10 |  | 20 |
| Sept. 21 | 1,640 | 45 | 103.3 | 25 |  | 20 | 45 |
| Sept. 22 | 1,650 | 15 | 103.1 | 10 |  | 5 | 15 |
| Sept. 23 | 1,680 | 65 | 104.2 | 50 | 20 | 15 | 45 |
| Sept. 24 | 1,715 | 50 | 103.2 | 40 | 5 | 10 | 45 |
| Sept. 25 | 1,725 | 15 | 102.1 | 10 |  | 5 | 15 |
| Sept. ${ }^{27}$ | 1,725 | 40 | 102.5 | 15 | 15 | 25 | 25 |
| Sept. 28 | 1, 740 | 20 | 102.4 | 15 |  | 5 | 20 |
| Sept. ${ }^{29}$ | 1, 765 | 55 | 101.9 | 25 5 |  | 15 | 55 |
| Oct. 1 | 1,750 | 20 | 101.8 |  | 10 | 20 | 10 |
| Oct. 2 | 1,775 | 45 | 101.6 | 25 |  | 20 | 45 |
| Oct. 4 | 1,795 | 45 | 101.1 | 40 | 20 | 5 | 25 |
| Oct. 5 | 1.795 | 50 | 98.2 | 40 | 40 | 10 | 10 |
| Oct. 6 | 1,680 | 235 | 95.3 | 40 | 155 | 195 | 80 |
| Oct. 7 <br> Oct. | 1, 680 | 5 | 97.0 |  |  | 5 | 5 |
| Oct. 9 | 1,690 | ${ }_{35}^{45}$ | 95.7 | ${ }_{25}^{10}$ | 20 | 10 | 15 |
| Oct. 11 | 1,670 | 50 | 94.0 | 15 | 35 | 35 | 15 |
| Oct. 13 | 1,640 | 55 | 95.0 | 25 | 55 | 30 |  |
| Oct. 14 | 1,625 | 50 | 94. 5 | 15 | 30 | 35 | 20 |
| Oct. 15 | 1,665 | 135 | 94.7 | 40 |  | 95 | 135 |
| Oct. 16 | 1,695 | 80 | 94.2 | 35 | 5 | 45 | 75 |
| Oct. 19 | 1,700 | 50 | 92.3 | 30 | 25 | 20 | 25 |
| Oct. 20 | 1.725 | 100 | 91.0 | 30 | 5 | 70 | 95 |
| Oct. 21 | 1,740 | 50 | 93.3 | 15 |  | 35 | 50 |
| Oct. 22 | 1,760 | 85 | 93.1 | 60 | 40 | 25 | 45 |
| Oct. 23 | 1,765 | 20 | 91.8 | 10 | 5 | 10 | 15 |
| Oct. 25 | 1,765 | 5 | 91.0 |  |  | 5 | 5 |
| Oct. 26 | 1,775 | 25 | 91.0 | 10 |  | 15 | 25 |
| Oct. 27 | 1,765 | 10 | 91.0 |  | 10 | 10 |  |
| Oct. 28 | 1,760 1,755 | 10 10 | ${ }_{91.5}^{91.5}$ |  | 10 | 10 5 | 5 |
| Nov. 1 | 1. 760 | 5 | 91.5 | 5 |  |  | 5 |
| Nov. 3 | 1,755 | 45 | 89.2 | 25 | 30 | 20 | 15 |
| Nov. 4 | 1,705 | 100 | 87.4 | 10 | 60 | 90 | 40 |
| Nov. 5 | 1,645 | 100 | 83.9 | 5 | 65 | 95 | 35 |
| Nov. 6 | 1,625 | 40 | 83.5 |  | 20 | 40 | 20 |
| Nov. 8 | 1,680 | 85 | 81.8 | 55 |  | 30 | 85 |
| Nov. 9 | 1,695 | 125 | 81.7 | 15 |  | 110 | 125 |
| Nov. 10 | 1, 705 | 40 | 84.5 | 15 | 5 | 25 | 35 |
| Nov. 15 | 1,700 | 20 | 88.0 | 10 | 20 | 10 |  |
| Nov. 17 | 1,700 | 15 | 81.5 |  |  | 15 | 15 |
| Nov. 19 | 1,710 | 40 | 79.3 | 35 | 25 | 5 | 15 |
| Nov. 20 | 1,655 | 100 | 77.6 |  | 55 45 | 100 | 45 |
| Nov. 22 | 1,645 | 135 | 75.0 | 35 | 45 | 100 | 90 |
| Nov. ${ }^{\text {Nov. }}$ 24-1. | 1,645 | ${ }_{25}^{20}$ | 75.0 75.4 |  | 20 | 20 | 20 |
| Nov. 26 | 1,595 | 30 | 77.4 |  | 30 | 30 |  |
| Nov. 29 | 1,565 | 55 | 81.3 | 20 | 50 | 35 | 5 |
| 286523 |  |  |  |  |  |  |  |

Table 31.-Wool top futures: Open contracts, volume of trading, and average price daily, by futures, Sept. 1, 1936, to June 30, 1938—Continued

1938 MARCH FUTURE-Continued

| Date | Open contracts | Volume of trading | Average price per pound | Longs |  | Shorts |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Purchases | Sales | Purchases | Sales |
| 1937 | 1,000 lb. | 1,000 lb. | Cents | 1,000 lb. | 1,000 lb. | 1,000 lb. | 1,000 lb. |
| Dec. 1 | 1,565 | 25 | 80.3 |  |  | 25 | $2$ |
| Dec. 2 | 1,565 | 5 | 79.5 |  |  | 5 |  |
| Dec. 3 | 1,560 | 15 | 80.8 | 5 | 10 | 10 | 5 |
| Dec. 4 | 1, 540 | 20 | 82.6 |  | 20 | 20 |  |
| Dec. 6 | 1,500 | 85 | 84.2 | 10 | 50 | 75 | 35 |
| Dec. 7 | 1,505 | 15 | 82.8 | 10 | 5 | 5 | 10 |
| Dec. 9 | 1,445 | 70 | 85.2 | 5 | 65 | 65 | 5 |
| Dec. 10 | 1,405 | 60 | 84.9 | 10 | 50 | 50 | 10 |
| Dec. 11 | 1,400 | 15 | 85.5 | 10 | 15 | 5 |  |
| Dec. 13 | 1,395 | 10 | 85.0 |  | 5 | 10 | 5 |
| Dec. 14 | 1,385 | 10 | 86.2 |  | 10 | 10 |  |
| Dec. 15 | 1,355 | 40 | 85.6 | 10 | 40 | 30 |  |
| Dec. 16 | 1,355 | 5 | 83.9 |  |  | 5 | 5 |
| Dec. 17 | 1,355 | 30 | 82.7 | 5 | 5 | 25 | 25 |
| Dec. 18 | 1,315 | 40 | 83.7 |  | 40 | 40 |  |
| Dec. 20 | 1,305 | 10 | 84.0 |  | 10 | 10 |  |
| Dec. 21 | 1,300 | 15 | 84.0 | 5 | 10 | 10 | 5 |
| Dec. 22 | 1,295 | 5 | 83.0 |  | 5 | 5 |  |
| Dec. 27 | 1,280 | 15 | 84.1 |  | 15 | 15 |  |
| Dec. 28 | 1,280 | 10 | 85.5 |  |  | 10 | 10 |
| Dec. 29 | 1,280 | 30 | 84.9 | ----------- |  | 30 | 30 |
| Dec. 31 | 1,280 | 15 | 84.0 |  |  | 15 | 15 |
| 1938 |  |  |  |  |  |  |  |
| Jan. 5-- | 1,265 | 15 | 83.0 |  | 15 | 15 |  |
| Jan. 6 | 1,250 | 15 | 83.0 |  | 15 | 15 |  |
| Jan. 7 | 1,235 | 15 | 82.8 | - | 15 | 15 |  |
| Jan. 8 | 1,235 | 5 | 82.0 |  |  | 5 | 5 |
| Jan. 10 | 1,235 | 10 | 81.9 |  |  | 10 | 10 |
| Jan. 12 | 1,235 | 5 | 81.7 | 5 | 5 |  |  |
| Jan. 14 | 1,225 | 10 | 81.5 |  | 10 | 10 |  |
| Jan. 15 | 1,215 | 15 | 81.3 | -- | 10 | 15 | 5 |
| Jan. 17 | 1,210 | 5 | 81.0 |  | 5 | 5 |  |
| Jan. 18 | 1,165 | 55 | 81.9 |  | 45 | 55 | 10 |
| Jan. 19 | 1,160 | 5 | 81.6 |  | 5 | 5 |  |
| Jan. 20 | 1,160 | 5 | 82.5 | 5 | 5 |  |  |
| Jan. 21 | 1,135 | 25 | 82.0 |  | 25 | 25 |  |
| Jan. 22 | 1,140 | 5 | 82.0 | 5 |  |  | 5 |
| Jan. 25 | 1.135 | 5 | 82.0 | -------.- | 5 | 5 |  |
| Jan. 26 | 1,070 | 65 | 78.6 |  | 65 | 65 |  |
| Jan. 27 | 1,070 | 10 | 78.0 |  |  | 10 | 10 |
| Jan. 28 | 1,060 | 10 | 79.0 |  | 10 | 10 |  |
| Feb. 4 | 1,030 | 45 | 78.0 | --------- | 30 | 45 | 15 |
| Feb. 5 | 1,025 | 5 | 78. 4 |  | 5 | 5 |  |
| Feb. 8 | 1,020 | 5 | 78.0 |  | 5 | 5 | --------- |
| Feb. 9 | 970 | 50 | 76.0 |  | 50 | 50 | ------------ |
| Feb. 10 | 955 | 15 | 76.4 | --------- | 15 | 15 | -------------- |
| Feb. 11 | 915 | 40 | 76.0 |  | 40 | 40 |  |
| Feb. 14 | 910 | 30 | 75.9 | --- | 5 | 30 | 25 |
| Feb. 15 | 880 | 30 | 76.3 |  | 30 | 30 | -------- |
| Feb. 16 | 875 | 5 | 76.0 |  | 5 | 5 | ------------- |
| Feb. 17 | 870 | 5 | 78.0 |  | 5 | 5 | -------------- |
| Feb. 18 | 855 | 15 | 78.7 |  | 15 | 15 |  |
| Feb. 23 | 215 | 640 | 77.5 |  | 640 | 640 | ------- |
| Feb. 24 | 210 | 5 | 80.0 |  | 5 | 5 | ---------- |
| Feb. 28 | 205 | 5 | 80.0 |  | 5 | 5 | ----------- |
| Mar. 3 | 200 | 5 | 80.6 |  | 5 | 5 | ------------ |
| Mar. 8 | 105 | 95 | 80.0 |  | 95 | 95 |  |
| Mar. 9 | 105 | 5 | 78.1 |  |  | 5 | 5 |
| Mar. 15 | 100 | 5 | 80.5 |  | 5 | 5 |  |
| Mar. 16 | 75 | 30 | 80.1 |  | 25 | 30 | 5 |
| Mar. 18 | 50 | 45 | 80.3 |  | 25 | 45 | 20 |
| Mar. 22 | 10 | 40 | 79.4 |  | 40 | 40 |  |
| Mar. 24 | 5 | 5 | 80.1 |  | 5 | 5 |  |
| Mar. 25 |  | 5 | 81.5 |  | 5 | 5 |  |
| Tota |  | 8,075 |  | 3,310 | 3,310 | 4,765 | 4,765 |
| Average |  |  | 96.1 | ---------- | -------- |  | ------- - |

Table 31.-Wool top futures: Open contracts, volume of trading, and average price, daily, by futures, Sept. 1, 1936, to June 30, 1938-Continued

1938 APRIL FUTURE


1938 MAY FUTURE

| 1937 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| June 5 |  | 5 | 110.5 | 5 | 5 |  |  |
| June 10 | 5 | 5 | 108.2 | 5 |  | -------- | 5 |
| June 22 | 55 | 50 | 109.0 | 50 |  |  | 50 |
| June 25 | 50 | 5 | 109.5 |  | 5 | 5 |  |
| June 28 | 50 | 5 | 109.5 | 5 | 5 |  |  |
| June 29 | 50 | 5 | 109.5 | 5 | 5 |  |  |
| July 1 | 50 | 5 | 109.5 | 5 | 5 |  |  |
| July 2 | 55 | 5 | 110.2 | 5 |  |  | 5 |
| July 7 | 65 | 10 | 110.5 | 10 |  |  | 10 |
| July 13 | 65 | 5 | 110.0 | 5 | 5 |  | -- |
| July 26 | 65 | 5 | 111.5 | 5 | 5 |  |  |
| July 31 | 65 | 5 | 112.0 | 5 | 5 |  |  |
| Aug. 3 | 65 | 5 | 111.5 |  |  | 5 | 5 |
| Aug. 4 | 65 | 15 | 111.5 |  |  | 15 | 15 |
| Aug. ${ }^{\text {- }}$ | 85 | 20 | 111.5 | 20 |  |  | 20 |
| Aug. 9 | 95 | 10 | 111.5 | 10 |  |  | 10 |
| Aug. 18 | 95 | 5 | 110.5 | 5 | 5 |  |  |
| Aug. 24 | 120 | 35 | 109.1 | 25 |  | 10 | 35 |
| Aug. 25 | 120 | 10 | 109.5 | 5 | 5 | 5 | 5 |
| Aug. 26 | 145 | 30 | 109.5 | 25 |  | 5 | 30 |
| Aug. 28 | 150 | 5 | 109.5 | 5 |  |  | 5 |
| Aug. 31 | 155 | 5 | 108.0 | 5 |  |  | 5 |
| Sept. 1 | 185 | 30 | 107.1 | 30 |  |  | 30 |
| Sept. 2 | 185 | 5 | 106. 0 | 5 | 5 |  |  |
| Sept. 3 | 195 | 25 | 106.4 | 10 |  | 15 | 25 |
| Sept. 7 | 210 | 15 | 104.5 | 15 |  |  | 15 |
| Sept. 13 | 225 | 15 | 103.5 | 15 |  |  | 15 |
| Sept. 14 | 220 | 5 | 103.5 |  | 5 | 5 |  |
| Sept. 15 | 255 | 35 | 103.9 | 35 |  |  | 35 |
| Sept. 16 | 255 | 15 | 104.5 | 5 | 5 | 10 | 10 |
| Sept. 18 | 255 | 15 | 103.8 | 15 | 15 |  | - |
| Sept. 21 | 255 | 10 | 103.1 | 10 | 10 |  |  |
| Sept. 22 | 260 | 5 | 103.0 | 5 |  |  | 5 |
| Sept. 23 | 260 | 25 | 103.5 |  |  | 25 | 25 |
| Sept. 24 | 400 | 155 | 102.2 | 140 |  | 15 | 155 |
| Sept. 25 | 400 | 15 | 102.0 | 15 | 15 |  |  |
| Sept. 30 | 410 | 15 | 101.8 | 10 |  | 5 | 15 |
| Oct. 1 | 400 | 10 | 102.0 |  | 10 | 10 |  |
| Oct. 2 | 400 | 30 | 101.8 |  |  | 30 | 30 |
| Oct. 4 | 400 | 20 | 101.0 | 10 | 10 | 10 | 10 |
| Oct. 5 | 435 | 45 | 98.5 | 40 | 5 | 5 | 40 |
| Oct. 6 | 420 | 120 | 95.8 | 60 | 75 | 60 | 45 |
| Oct. 7 | 430 | 10 | 96.3 | 10 |  |  | 10 |
| Oct. 8 | 445 | 40 | 97.0 | 35 | 20 | 5 | 20 |
| Oct. 9 | 440 | 5 | 96.3 |  | 5 | 5 |  |
| Oct. 11 | 500 | ¢0 | 94.5 | 60 |  |  | 60 |
| Oct. 13 | 600 | 125 | 94.1 | 110 | 10 | 15 | 115 |
| Oct. 14--- | 605 | 45 | 94.2 | 30 | 25 | 15 | 20 |

Table 31.-Wool top futures: Open contracts, volume of trading, and average price, daily, by futures, Sept. 1, 1936, to June 30, 1938-Continued

1938 MAY FUTURE-Continued

| Date | Open contracts | Volume of trading | Average price per pound | Longs |  | Shorts |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Purchases | Sales | Purchases | Sales |
| 1937 | 1,000 lb. | 1,000 lb . | Cents | 1,000 lb. | 1,000 lb. | 1,000 lb. | 1,000 lb. |
| Oct. 15 | 720 | 115 | 94.4 | 115 |  |  | 115 |
| Oct. 16 | 740 | 30 | 94.0 | 30 | 10 |  | 20 |
| Oct. 18 | 795 | 95 | 94.1 | 65 | 10 | 30 | 85 |
| Oct. 19 | 865 | 90 | 91.3 | 80 | 10 | 10 | 80 |
| Oct. 20 | 930 | 90 | 91.0 | 80 | 15 | 10 | 75 |
| Oct. 21 | 1,020 | 250 | 93.2 | 135 | 45 | 115 | 205 |
| Oct. 22 | 1,025 | 60 | 93.1 | 45 | 40 | 15 | 20 |
| Oct. 23 | 1,065 | 50 | 91.8 | 50 | 10 |  | 40 |
| Oct. 25 | 1,080 | 15 | 90.8 | 15 |  |  | 15 |
| Oct. 26 | 1,005 | 170 | 91.4 | 5 | 80 | 165 | 90 |
| Oct. 27 | 985 | 85 | 91.4 |  | 20 | 85 | 65 |
| Oct. 28 | 985 | 30 | 91.6 | 25 | 25 | 5 | 5 |
| Oct. 29 | 960 | 50 | 92.0 | 25 | 50 | 25 |  |
| Oct. 30 | 980 | 35 | 91.9 | 30 | 10 | 5 | 25 |
| Nov. 1 | 980 | 5 | 91.5 |  |  | 5 | 5 |
| Nov. 3 | 950 | 70 | 88.8 | 5 | 35 | 65 | 35 |
| Nov. 4 | 935 | 95 | 87.3 | 15 | 30 | 80 | 65 |
| Nov. 5 | 930 | 50 | 83.5 | 15 | 20 | 35 | 30 |
| Nov. 6 | 1,005 | 150 | 83.3 | 80 | 5 | 70 | 145 |
| Nov. 8 | 1,020 | 115 | 81.2 | 40 | 25 | 75 | 90 |
| Nov. 9 | 960 | 75 | 81.5 | 5 | 65 | 70 | 10 |
| Nov. 10 | 950 | 135 | 84.5 | 40 | 50 | 95 | 85 |
| Nov. 12 | 955 | 130 | 84.5 | 70 | 65 | 60 | 65 |
| Nov. 13 | 960 | 25 | 82.9 | 5 |  | 20 | 25 |
| Nov. 15 | 1,000 | 65 | 82.0 | 40 |  | 25 | 65 |
| Nov. 16 | 990 | 50 | 81.3 | 10 | 20 | 40 | 30 |
| Nov. 17 | 970 | 35 | 81.0 | 5 | 25 | 30 | 10 |
| Nov. 18 | 970 | 10 | 80.8 |  |  | 10 | 10 |
| Nov. 19 | 1,000 | 225 | 79.2 | 60 | 30 | 165 | 195 |
| Nov. 20 | 1,025 | 80 | 76.6 | 25 |  | 55 | 80 |
| Nov. 22 | 1,155 | 195 | 75.7 | 135 | 5 | 60 | 190 |
| Nov. 23 | 1,175 | 25 | 74.9 | 20 |  | 5 | 25 |
| Nov. 24. | 1,230 | 120 | 76.0 | 60 | 5 | 60 | 115 |
| Nov. 26 | 1,175 | 155 | 77.3 | --- | 55 | 155 | 100 |
| Nov. 27 | 1,145 | 30 | 80.0 |  | 30 | 30 |  |
| Nov. 29 | 1,125 | 45 | 81.0 |  | 20 | 45 | 25 |
| Nov. 30 | 1,140 | 125 | 81.0 | 30 | 15 | 95 | 110 |
| Dec. 2 | 1,160 | 90 | 79.4 | 40 | 20 | 50 | 70 |
| Dec. 4 | 1,155 | 20 | 82.2 | 5 | 10 | 15 | 10 |
| Dec. 6 | 1,145 | 25 | 84.2 |  | 10 | 25 | 15 |
| Dec. 7 | 1,155 | 15 | 82.7 | 10 |  | 5 | 15 |
| Dec. 8 | 1,160 | 30 | 83.7 | 5 |  | 25 | 30 |
| Dec. 9 | 1,160 | 40 | 84.8 | 15 | 15 | 25 | 25 |
| Dec. 10 | 1,140 | 25 | 84.3 |  | 20 | 25 | 5 |
| Dec. 11 | 1,105 | 45 | 85.0 |  | 35 | 45 | 10 |
| Dec. 13 | 1,100 | 40 | 85.0 |  | 5 | 40 | 35 |
| Dec. 14 | 1,070 | 50 | 85.8 |  | 30 | 50 | 20 |
| Dec. 15 | 1,035 | 100 | 85.1 | 20 | 55 | 80 | 45 |
| Dec. 16 | 1,015 | 25 | 83.4 | 5 | 25 | 20 |  |
| Dec. 17 | 1,035 | 35 | 81.8 | 25 | 5 | 10 | 30 |
| Dec. 20 | 1,025 | 10 | 83.0 |  | 10 | 10 |  |
| Dec. 21 | 1,045 | 70 | 82.4 | 20 |  | 50 | 70 |
| Dec. 22 | 1,040 | 5 | 83.5 |  | 5 | 5 |  |
| Dec. 23 | 1,055 | 15 | 82.5 | 15 |  |  | 15 |
| Dec. 28 | 1,050 | 35 | 83.1 | 30 | 35 | 5 |  |
| Dec. 29 | 1,025 | 25 | 83.0 |  | 25 | 25 |  |
| Dec. 30 | 1,020 | 25 | 82.4 |  | 5 | 25 | 20 |
| 1938 |  |  |  |  |  |  |  |
| Jan. 3 | 1,015 | 10 | 81.2 |  | 5 | 10 | 5 |
| Jan. 4 | 1,000 | 25 | 80.7 |  | 15 | 25 | 10 |
| Jan. 5 | 1,000 | 5 | 82.0 |  |  | 5 | 5 |
| Jaı. 6 | 995 | 5 | 81.0 |  | 5 | 5 |  |
| Jan. 7 | 990 | 5 | 82.0 |  | 5 | 5 |  |
| Jan. 8 | 1,000 | 65 | 80.2 | 10 |  | 55 | 65 |
| Jan. 10 | 990 | 10 | 80.4 | ----------- | 10 | 10 |  |
| Jan. 11 | 980 | 15 | 79.8 | 5 | 15 | 10 |  |
| Jan. 13 | 970 | 20 | 80.0 |  | 10 | 20 | 10 |
| Jan. 14 | 920 | 55 | 79.7 |  | 50 | 55 | 5 |
| Jan. 15 | 925 | 10 | 79.0 | 5 |  | 5 | 10 |
| Jan. 17 | 895 | 45 | 79.0 |  | 30 | 45 | 15 |
| Jan. 20 | 885 | 10 | 79.0 |  | 10 | 10 | ---------- |
| Jan. 21 | 875 | 10 | 80.5 |  | 10 | 10 |  |
| Jan. 25... | 865 | 10 | 79.0 | ------------- | 10 | 10 | ------------- |

Table 31.-Wool top futures: Open contracts, volume of trading, and average price, daily, by futures, Sept. 1, 1936, to June 30, 1938-Continued

1938 MAY FUTURE-Continued

| Date | Open contracts | Volume of trading | A verage price per pound | Longs |  | Shorts |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Purchases | Sales | Purchases | Sales |
| Jan 1938 | 1,000 lb. | 1,000 lb. | Cents | 1,000 lb. | 1,000 lb. | 1,000 lb. | 1,000 lb |
| Jan. 27--- | 830 | 45 | 78. 6 |  | 35 | 40 |  |
| Jan. 28--- | 830 | 15 | 76.5 |  |  | 15 | 15 |
| Jan. 31 | 830 | 100 | 77.0 |  |  | 100 | 100 |
| Feb. 1 | 825 | 25 | 77.7 |  | 5 | 25 | 20 |
| Feb. 3 | 825 | 75 | 77.1 | 5 | 5 | 70 | 70 |
| Feb. 4 | 760 | 70 | 76. 3 | 5 | 70 | 65 |  |
| Feb. 5 | 755 | 10 | 75.5 |  | 5 | 10 | 5 |
| Feb. 7 | 725 | 45 | 75.1 | 5 | 35 | 40 | 10 |
| Feb. 8 | 725 | 30 | 74.6 |  |  | 30 | 30 |
| Feb. 10 | 725 | 5 | 74.0 |  |  | 5 | 5 |
| Feb. 15 | 730 | 5 | 74.5 | 5 |  |  | 5 |
| Feb. 16... | 730 | 10 | 74.5 |  |  | 10 | 10 |
| Feb. 17-- | 725 | 25 | 75. 9 |  | 5 | 25 | 20 |
| Feb. 18 | 715 | 15 | 77.6 | 5 | 15 | 10 |  |
| Feb. 19 | 715 | 10 | 77.0 |  |  | 10 | 10 |
| Feb. 25 | 690 | 25 | 79.2 |  | 25 | 25 |  |
| Feb. 26 | 685 | 5 | 80.0 |  | 5 | 5 |  |
| Mar.1- | 660 | 25 | 80.0 |  | 25 | 25 |  |
| Mar. ${ }^{\text {- }}$ | 660 | 5 | 79.5 |  |  | 5 | 5 |
| Mar. 8. | 660 | 5 | 78.0 | 5 | 5 |  |  |
| Mar. 9 | 660 | 5 | 77.0 |  |  | 5 | 5 |
| Mar. 10 | 655 | 5 | 77.0 |  | 5 | 5 |  |
| Mar. 14 | 655 | 5 | 80.0 | 5 | 5 |  |  |
| Mar. 15 | 655 | 80 | 79.1 |  |  | 80 | 80 |
| Mar. 21 | 615 | 40 | 79.0 |  | 40 | 40 |  |
| Mar. 24 | 610 | 5 | 78.2 |  | 5 | 5 | -.-.-.---- |
| Mar. 29 | 590 | 20 | 80.0 |  | 20 | 20 |  |
| Mar. 30 | 585 | 5 | 80.0 |  | 5 | 5 |  |
| Mar. 31 | 580 | 10 | 79.1 |  | 5 | 10 | 5 |
| Apr. 5. | 565 | 15 | 79.1 |  | 15 | 15 |  |
| Apr. 7 - | 565 | 5 | 78.5 |  |  | 5 | 5 |
| Apr. 8 | 560 | 5 | 78.4 |  | 5 | 5 |  |
| Apr. 11 | 570 | 35 | 79.1 | 10 |  | 25 | 35 |
| Apr. 12 | 570 | 20 | 78.2 |  |  | 20 | 20 |
| Apr. 21 | 570 | 40 | 80.0 |  |  | 40 | 40 |
| Apr. 22 | 570 | 20 | 80.0 | 10 | 10 | 10 | 10 |
| Apr. 25 | 570 | 20 | 79.1 |  |  | 20 | 20 |
| Apr. 26 | 565 | 15 | 79.3 | 10 | 15 | 5 | --.------- |
| May 4 | 560 | 5 | 76.2 |  | 5 | 5 | --------- |
| May 5. | 555 | 5 | 77.0 |  | 5 | 5 |  |
| May 6. | 555 | 5 | 77.0 | 5 | 5 |  |  |
| May 10. | 215 | 340 | 77.2 |  | 340 | 340 | ---------- |
| May 11. | 210 | 5 | 77.7 |  | 5 | 5 |  |
| May 14 | 205 | 15 | 76.0 | 10 | 15 | 5 |  |
| May 18 | 65 | 140 | 75.0 |  | 140 | 140 |  |
| May 20 | 65 | 5 | 75.8 | 5 | 5 |  |  |
| May 21. | 65 | 5 | 75.4 | 5 | 5 |  |  |
| May 24. |  | 70 | 73.6 | 5 | 70 | 65 |  |
| Total |  | 6,870 |  | 2, 535 | 2, 535 | 4,335 | 4,335 |
| Average |  |  | 85.7 |  |  |  |  |

1938 JUNE FUTURE

| 1938 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Jan 11. | 5 | 5 | 80.0 | 5 |  |  | 5 |
| Jan. 13. | 10 | 5 | 80.0 | 5 |  |  | 5 |
| Jan. 21 | 10 | 5 | 79.0 |  |  | 5 | 5 |
| Feb. 18 | 15 | 5 | 76.5 | 5 |  |  |  |
| Mar. 22 | 10 | 5 | 77.5 |  | 5 | 5 |  |
| Apr. 19. | 20 | 10 | 79.0 | 10 |  |  | 10 |
| May 25 |  | 30 | 73.5 |  | 20 | 30 | 10 |
| Total |  | 65 |  | 25 | 25 | 40 | 40 |
| Averag |  |  | 76.3 |  |  |  | -- |

Table 31.-Wool top futures: Open contracts, volume of trading, and average price, daily, by futures, Sept. 1, 1936, to June 30, 1938-Continued

1938 JULY FUTURE ${ }^{3}$

| Date | $\underset{\text { Open con- }}{\text { tracts }}$ | Volume of trading | A verage price per pound | Longs |  | Shorts |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Purchases | Sales | Purchases | Sales |
| Aug. $4^{1987}$ | 1,000 lb. ${ }_{5}$ | 1,000 lb. ${ }_{5}$ | Cents 111.0 | $1,000 \mathrm{lb} .$ | 1,000 lb. | 1,000 lb. | $1,000 \mathrm{lb} .$ |
| Aug. 10-- | 30 | 25 | 111.0 | 25 |  |  | 25 |
| Aug. 16 | 35 | 5 | 110.5 | 5 |  |  | 5 |
| Aug. 24 | 45 | 10 | 109. 0 | 10 |  |  | 10 |
| Aug. 27 | 45 | 10 | 109. 5 | 10 | 10 |  |  |
| Aug. 30- | 50 | 5 | 108.5 | 5 |  |  | 5 |
| Aug. 31 | 55 | 5 | 108.0 | 5 |  |  | 5 |
| Sept. 1 <br> Sept. 2 | 80 85 | 30 5 5 | 106.8 106.5 | 25 5 |  | 5 | 30 5 |
| Sept. 7 | 110 | 25 | 104.5 | 25 |  |  | 25 |
| Sept. 8 | 170 | 60 | 104. 0 | 60 |  |  | 60 |
| Sept. ${ }_{\text {Sept. }} 10$ | ${ }_{210}^{200}$ | 45 | 103.5 | 30 15 | 5 | 15 | 45 10 |
| Sept. 11 | 215 | 10 | 104.5 | 10 | 5 |  | ${ }_{5}$ |
| Sept. 13 | 220 | 5 | 103.5 | 5 |  |  | 5 |
| Sept. 15- | 225 | 5 | 103.5 | 5 |  |  | 5 |
| Sept. 16 <br> Sept. 18 | 220 | 5 5 | 104.5 | 5 | 5 | 5 | 5 |
| Sept. 20 | 230 | 5 | 103.4 | 5 |  |  | 5 |
| Sept. 21 | 255 | 25 | 103.0 | 25 |  |  | 25 |
| Sept. 22 | 255 | 40 | 103.1 | 25 | 25 | 15 | 15 |
| Sept. 23 | 265 | 25 | 104. 1 | 15 | 15 | 10 | 10 |
| Sept. 24 | ${ }_{260}$ | 5 | 102.5 | 5 |  |  | 5 |
| Oept. 27 | 300 | 20 | 101.7 | 20 |  |  | 20 |
| Oct. 4 | 305 | 5 | 101.0 | 5 |  |  | 5 |
| Oct. 5 | 300 | 5 | 99.0 |  | 5 | 5 |  |
| Oct. 6 | 320 | 60 | 95.7 | 40 | 20 | 20 | 40 |
| Oct. 7 | 325 | 5 | 96.2 | 5 |  |  | 5 |
| Oct. 8 | 420 | 120 | 95.6 | 95 |  | 25 | 120 |
| Oct. 11 | 435 | 20 | 94.2 | 20 | 5 |  | 15 |
| Oct. 13- | 460 470 | 45 10 | 94.2 | 35 10 | 10 | 10 | 35 10 |
| Oct. 15 | 560 | 90 | 94.3 | 90 |  |  | - |
| Oct. 16 | 615 | 85 | 94.0 | 55 |  | 30 | 85 |
| Oct. 18 | 685 | 70 | 94.0 | 70 |  |  | 70 |
| Oct. 19 | 725 | 130 | 92.7 | 75 | 35 | 55 | 95 |
| Oct. 20 | 775 | 60 | 91.0 | 60 | 10 |  | 50 |
| Oct. 21 | 835 | 90 30 | ${ }_{92}^{93.3}$ | ${ }_{25}^{90}$ | 15 | 5 | 15 |
| Oct. 23 | 880 | 35 | 92.0 | 35 |  |  | 35 |
| Oct. 25 | 915 | 65 | 90.7 | 35 |  | 30 | 65 |
| Oct. 26 | 915 | 20 | 90.5 |  |  | 20 | 20 |
| Oct. 27 | 925 | 10 | 91.4 | 10 |  |  | 10 |
| Oct. 28 | 990 | 40 | 91.5 | 25 |  | ${ }_{25}^{15}$ | 40 |
| Oct. 30 | 1,000 | 40 50 | 91.8 91.9 | 35 |  | 15 | 50 |
| Nov. 3 | 1,005 | 75 | 89.0 | 35 | 30 | 40 | 45 |
| Nov. 4 | 1,075 | 100 | 86.5 | 70 |  | 30 | 100 |
| Nov. 5 | 1,340 | 320 | 83.8 | 280 | 15 | 40 | 305 |
| Nov. 6 | 1,505 | 300 | 83.2 | 180 | 15 | 120 | 285 |
| Nov. 8. | 1,505 | 215 | 81.3 | 145 | 145 | 70 | 70 |
| Nov. 9 | 1,565 | 295 | 82.1 | 205 | 145 | 90 | 150 |
| Nov. 10 | 1,510 | 195 | 84.3 | 45 | 100 | 150 | 95 |
| Nov. 12 | 1,510 | 140 | 84.5 | 65 | 65 | 75 | 75 |
| Nov. 13 | 1,505 | 40 | 82.2 |  | 5 | 40 | 35 |
| Nov. 15- | 1,530 | 35 | 82.0 | 25 |  | 10 | 35 |
| Nov. 16 | 1,510 | 145 | 81.7 | 5 | 25 | 140 | 120 |
| Nov. 17 | 1,545 | 105 | 81.0 | 35 |  | 70 | 105 |
| Nor. 18 - | 1,560 | 80 | 80.9 | 15 |  | 65 | 80 |
| Nov. 19-- | 1,570 | $\stackrel{365}{95}$ | 79.7 | 120 | 110 | 245 | 255 95 |
| Nov. 20 Nov. 22 | 1,595 1,585 | 95 220 | 76.9 75.2 | 25 135 | 145 | 70 85 | 95 75 |
| Nov. 23 | 1, 620 | 155 | 74.9 | 75 | 40 | 80 | 115 |
| Nov. 24 | 1,740 | 300 | 75.9 | 130 | 10 | 170 | 290 |
| Nov. 26 | 1,770 | 180 | 77.4 | 60 | 30 | 120 | 150 |
| Nov. 27. | 1,795 | 200 | 79.7 | 70 | 45 | 130 | 155 |
| Nov. 29 | 1,855 | 140 | 80.8 | 120 | 60 | 20 | 80 |
| Nov. 30 | 1,835 | 95 | 80.2 | 15 | 35 | 80 | 60 |
| Dec. 3 | 1,825 | 15 | 80.7 | 5 | 15 | 10 |  |
| Dec. 4 | 1,825 | 60 | 82.5 | 20 | 20 | 40 | 40 |
| Dec. 6 | 1, 830 | 35 | 84.0 | 15 | 10 | $\stackrel{20}{5}$ | 25 |
| Dec. 7 | 1,830 | 5 | 83.0 |  |  | 5 | 5 |
| Dec. 8 | 1,805 | - 125 | 83.2 84.6 | 15 | 40 60 | 30 55 | ${ }_{6}^{5}$ |
| Dec. 9 | 1,815 1,810 | 125 50 | 84.6 84.3 | 70 25 | 60 30 | 55 25 | 65 20 |

${ }^{2}$ Includes 65,000 pounds of uncleared "curb" trades in November 1937.

Table 31.-Wool top futures: Open contracts, volume of trading, and average price, daily, by futures, Sept. 1, 1936, to June 30, 1938-Continued

1938 JULY FUTURE-Continued

| Date | Open contracts | Volume of trading | Average price per pound | Longs |  | Shorts |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Purchases | Sales | Purchases | Sales |
| 1937 | 1,000 lb. | 1,000 lb. | Cents | 1,000 lb. | 1,000 lb. | 1,000 lb. | $1,000 \mathrm{lb} .$ |
| Dec. 11-.... | 1,830 | 40 | 85.0 | 30 | 10 | 10 | $30$ |
| Dec. 13 | 1,815 | 75 | 84.8 | 60 | 75 | 15 |  |
| Dec. 14 | 1,830 | 75 | 86.0 | 65 | 50 | 10 | 25 |
| Dec. 15 | 1,795 | 80 | 84.8 | 25 | 60 | 55 | 20 |
| Dec. 16 | 1,795 | 20 | 83.4 | 15 | 15 | 5 | 15 |
| Dec. 17 | 1,840 | 95 | 81.3 | 90 | 45 | 5 | 50 |
| Dec. 18 | 1,860 | 40 | 82.1 | 30 | 10 | 10 | 30 |
| Dec. 20 | 1,855 | 25 | 82.8 | 20 | 25 | 5 |  |
| Dec. 21 | 1,860 | 145 | 82.4 | 80 | 75 | 65 | 70 |
| Dec. 22 | 1, 860 | 5 | 82.9 |  |  | 5 | 5 |
| Dec. 23 | 1,860 | 15 | 82.5 | 5 | 5 | 10 | 10 |
| Dec. 24 | 1,865 | 5 | 82.5 | 5 |  |  | 5 |
| Dec. 27 | 1,865 | 10 | 83.5 | 10 | 10 |  |  |
| Dec. 28 | 1,870 | 20 | 83.0 | 10 | 5 | 10 | 15 |
| Dec. 29 | 1,855 | 65 | 83.0 |  | 15 | 65 | 50 |
| Dec. 30 | 1,855 | 40 | 82.3 | 25 | 25 | 15 | 15 |
| Dec. 31 | 1,850 | 15 | 82.5 | 5 | 10 | 10 | 5 |
| Jan. 1938 |  |  |  |  |  |  |  |
| Jan. 3-.-- | 1,845 | 95 | 80.8 | 45 | 50 | 50 | 45 |
| Jan. 4 | 1, 820 | 30 | 80.2 |  | 25 | 30 | 15 |
| Jan. 6 | 1,845 | 30 | 80.7 | 25 |  | 5 | 30 |
| Jan. 7 | 1,840 | 10 | 80.4 |  | 5 | 10 | ! 5 |
| Jan. 8 | 1,825 | 85 | 79.7 | 30 | 45 | 55 | 40 |
| Jan. 10 | 1,820 | 45 | 79.1 | 5 | 10 | 40 | 35 |
| Jan. 11 | 1,795 | 145 | 79.2 | 20 | 45 | 125 | 100 |
| Jan. 12 | 1,800 | 20 | 78.7 | 5 |  | 15 | 20 |
| Jan. 13 | 1,805 | 45 | 78.8 | 30 | 25 | 15 | 20 |
| Jan. 14 | 1,760 | 45 | 78.4 |  | 45 | 45 |  |
| Jan. 15 | 1, 780 | 60 | 78.0 | 30 | 10 | 30 | 50 |
| Jan. 17 | 1, 740 | 50 | 78.7 |  | 40 | 50 | 10 |
| Jan. 18 | 1,735 | 10 | 79.6 | 5 | 10 | 5 |  |
| Jan. 19 | 1,730 | 20 | 79.4 |  | 5 | 20 | 15 |
| Jan. 20 | 1,725 | 80 | 78.1 | 30 | 35 | 50 | 45 |
| Jan. 21 | 1,700 | 25 | 78.8 |  | 25 | 25 |  |
| Jan. 22 | 1,700 | 5 | 78.0 |  |  | 5 | 5 |
| Jan. 24 | 1,695 | 20 | 78.0 | 15 | 20 | 5 |  |
| Jan. 25 | 1, 700 | 55 | 77.8 | 5 |  | 50 | 55 |
| Jan. 26 | 1, 730 | 155 | 76.1 | 35 | 5 | 120 | 150 |
| Jan. 27 | 1,730 | 15 | 75.5 | 15 | 15 |  |  |
| Jan. 28 | 1,730 | 70 | 75.4 | 20 | 20 | 50 | 50 |
| Jan. 29 | 1,730 | 5 | 75.5 |  |  | 5 | 15 |
| Jan. 31 | 1,735 | 10 | 76.0 | 5 |  | 5 | 10 |
| Feb. 1 | 1,700 | 35 | 76.6 |  | 35 | 35 |  |
| Feb. 2 | 1,690 | 10 | 76.0 |  | 10 | 10 |  |
| Feb. 3 | 1,675 | 110 | 75.6 | 80 | 95 | 30 | 15 |
| Feb. 4 | 1,675 | 10 | 75.0 |  |  | 10 | 10 |
| Feb. 7 | 1,665 | 15 | 74.0 | 5 | 15 | 10 |  |
| Feb. 8 | 1,665 | 5 | 74.0 | 5 | 5 |  |  |
| Feb. 9 | 1,645 | 85 | 74.1 | 50 | 70 | 35 | 15 |
| Feb. 10 | 1,625 | 55 | 73.2 | 30 | 50 | 25 | 5 |
| Feb. 11 | 1,530 | 120 | 72.9 | 20 | 115 | 100 | 5 |
| Feb. 14 | 1,470 | 80 | 72.8 | 20 | 80 | 60 |  |
| Feb. 15 | 1,480 | 45 | 73.4 | 30 | 20 | 15 | 25 |
| Feb. 16 | 1,480 | 40 | 73.4 | 10 | 10 | 30 | 30 |
| Feb. 17 | 1,480 | 80 | 74.8 | 45 | 45 | 35 | 35 |
| Feb. 18 | 1,600 | 275 | 77.6 | 265 | 145 | 10 | 130 |
| Feb. 19 | 1,640 | 40 | 76.2 | 40 |  |  | 40 |
| Feb. 21 | 1,635 | 40 | 75.5 | 5 | 10 | 35 | 30 |
| Feb. 23 | 1,670 | 55 | 76.9 | 50 | 15 | 5 | 40 |
| Feb. 24 | 1,695 | 100 | 77.4 | 30 | 5 | 70 | 95 |
| Feb. 25 | 1,705 | 70 | 78.5 | 20 | 10 | 50 | 60 |
| Feb. 26 | 1,605 | 220 | 79.8 | 65 | 165 | 155 | 55 |
| Feb. 28 | 1,610 | 30 | 78.8 | 15 | 10 | 15 | 20 |
| Mar. 1- | 1,625 | 20 | 78.2 | 15 |  | 5 | 20 |
| Mar. 2 | 1,625 | 40 | 77.7 | 10 | 10 | 30 | 30 |
| Mar. 3 | 1,625 | 10 | 77.5 |  |  | 10 | 10 |
| Mar. 4 | 1,620 | 10 | 77.0 | 5 | 10 | 5 |  |
| Mar. 5 | 1,635 | 15 | 77.0 | 15 |  |  | 15 |
| Mar. 8 | 1,640 | 25 | 76.7 | 5 |  | 20 | 25 |
| Mar. 9 | 1,615 | 75 | 75.7 | 50 | 75 | 25 |  |
| Mar. 11 | 1,620 | 15 | 76.0 | 15 | 10 |  | 5 |
| Mar. 12 | 1,620 | 30 | 77.5 | 30 | 30 | ----------- |  |
| Mar. 14 | 1,625 | 10 | 77.9 | 10 | 5 |  | ${ }_{10}^{5}$ |
| Mar. 15 | 1,635 | 10 | 76.4 | 10 |  |  | 10 |
| Mar. 16. | 1,500 | 150 | 76.8 | 15 | 150 | 135 |  |
| Mar. 18.- | 1,550 | 60 | 76.8 | 50 |  | 10 | 6 ) |

Table 31.-Wool top futures: Open contracts, volume of trading, and average price, daily, by futures, Sept. 1, 1936, to June 30, 1938—Continued

1938 JULY FUTURE-Continued

| Date | Open contracts | Volume of trading | Arerage price per pound | Longs |  | Shorts |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Purchases | Sales | Purchases | Sales |
| $\text { Mar. } 22^{1938}$ | $\begin{gathered} 1,000 \mathrm{lb} . \\ 1,545 \end{gathered}$ | 1,000 $\mathrm{lb} .{ }_{5}$ | Cents | 1,000 lb. | $1,000 \mathrm{lb}{ }_{5}$ | 1,000 lb. | 1,000 lb. |
| Mar. ${ }^{\text {Mar. } 23}$ | $\begin{aligned} & 1,545 \\ & 1,545 \end{aligned}$ | 5 35 | $\begin{aligned} & 77.4 \\ & 76.9 \end{aligned}$ |  |  | 5 35 |  |
| Mar. 24 | 1,545 | 5 | 77.0 | 5 | 5 | 35 | 35 |
| Mar. 25 | 1,540 | 5 | 76.8 |  | 5 | 5 |  |
| Mar. 28 | 1,525 | 15 | 78.5 |  | 15 | 15 |  |
| Mar. ${ }^{\text {29 }}$ | 1,535 | 25 | 78.5 | 25 | 15 |  | 10 |
| Mar. 31 | 1,485 | 60 30 | 78.8 | 25 | 50 10 | 60 5 | 10 |
| Apr. 1 | 1,500 | 25 | 76.4 | 5 | 5 | 20 | 20 |
| Apr. 5 | 1,535 | 80 | 76.6 | 35 |  | 45 | 80 |
| ${ }_{\text {Apr. }} \mathbf{6}$-- | 1,540 | 60 | 76.1 | 5 |  | 55 | 60 |
| 4 pr 8 | 1,535 1,530 | ${ }_{20}^{10}$ | 76.5 | 5 | 10 5 | 5 | 15 |
| Apr. 9 | 1,525 | 80 | 77.8 |  | 5 | 80 | 15 |
| ${ }^{\text {Apr. }} 11$ | 1,485 | 55 | 78.0 |  | 40 | 55 | 15 |
| Apr. 12 | 1,490 1,490 | 5 | 77.5 | 5 |  |  | 5 |
| Apr. 14 | 1,465 | 75 | 78.5 | 10 | 35 | 65 | $\stackrel{25}{40}$ |
| Apr. 18 | 1,455 | 120 | 79.1 | 45 | 55 | 75 | ${ }_{65}^{40}$ |
| Apr. 19-- | 1,455 | 10 | 79.2 |  |  | 10 | 10 |
| Apr. 20 | 1,445 | 10 | 79.5 |  | 10 | 10 |  |
| Apr. 21 | 1,450 | 60 | 79.5 | 15 | 10 | 45 | 50 |
| Apr. 22 | 1,460 | 50 | 79.6 | 15 | 5 | 35 | 45 |
| Apr. 23 | 1,460 | 5 | 79.0 |  |  | 5 | 5 |
| Apr. 25 | 1.440 | 40 | 79.2 |  | 20 | 40 | 20 |
| Apr. 27 | 1,445 1,440 | $\begin{array}{r}35 \\ 5 \\ \hline\end{array}$ | 79.0 | 10 | 5 | 25 | 30 |
| Apr. 28 | 1,410 | 30 | 78.0 |  | 30 | 30 |  |
| Apr. 29 | 1,405 | 10 | 77.5 |  | 5 | 10 | 5 |
| Apr. 30 | 1,410 | 20 | 77.0 | 10 | 5 | 10 | 15 |
| May 2 | 1,420 | 10 | 77.0 | 10 |  |  | 10 |
| May ${ }^{\text {M }}$ | 1,410 | 25 | 76.3 | 10 | 20 | 15 |  |
| May 5---- | 1,440 | ${ }_{4}^{5}$ | 76.0 76.4 | 25 |  | 20 | 45 |
| May 6 | 1,440 | 65 | 76.4 | 20 | 20 | 45 | 45 |
| May 7 | 1,435 | 15 | 76.6 | 10 | 15 | 5 |  |
| May 10 | 1,465 | 30 | 76.4 | 30 |  | 20 | 30 20 |
| May 11-- | 1,470 | 20 | 76.0 | 5 |  | 15 | 20 |
| May 12 | 1,460 | 25 | 75.9 |  | 10 | 25 | 15 |
| May 14- | 1,445 | 25 | 75.5 |  | 15 | 25 | 10 |
| May 176 | 1,445 | 5 | 75.5 |  |  | 5 | 5 |
| May 18 | 1,420 | 50 | 74.9 | 15 | 40 | 35 | 10 |
| May 19 | 1,405 | 10 | 74.8 76.2 | 5 | 10 | 30 5 | 20 |
| May 20 | 1,400 | 20 | 74.4 |  | 5 | 20 | 15 |
| May 21 | 1,390 | 10 | 74.2 |  | 10 | 10 |  |
| May 24 | 1,385 | 30 | 73.5 |  | 5 | 30 | 25 |
| May 25 | 1,375 | 15 | 73.3 |  | 10 | 15 | 5 |
| May 27 | 1,310 | 65 | 73.6 |  | 65 | ${ }_{30}$ |  |
| May 28 | 1,305 | 10 | 73.0 |  | 5 | 10 | 5 |
| May 31 | 1,285 | 35 | 72.7 | 5 | 25 | 30 | 10 |
| June 2 | 1,255 | 35 | 73.1 |  | 30 | 35 |  |
| June 3 | 1,250 | 10 | 72.2 |  | 5 | 10 | 15 |
| June 4 | 1,245 | 20 | 72.0 |  | 5 | 20 | 15 |
| June 6 | 1,205 | 50 | 73.0 |  | 40 | 50 | 10 |
| June 7 | 1,145 | 60 | 73.0 |  | 60 | 60 |  |
| June ${ }^{\text {June }} 13$ | 1,110 | 150 | 73.4 |  | 35 | 150 | 115 |
| June 14 | 1,110 | 10 | 72.6 | 10 | 10 |  |  |
| June 16 | 1,1095 | ${ }_{5}$ | 72.5 |  | 5 | 5 |  |
| June 18.. | 1,090 | 5 | 72.5 |  | 5 | 5 |  |
| June 20 | 1,080 | 25 | 72.5 |  | 10 | 25 | 15 |
| June 21 | 1, 065 | 35 | 74.1 |  | 15 | 35 | 20 |
| June 22 | 1, 030 | 45 | 75.0 | 5 | 40 | 40 | 5 |
| June 23 | 1,010 | 20 | 75.1 |  | 20 | 20 |  |
| June 24 | 960 | 55 | 76.0 | 5 | 55 | 50 |  |
| June | 960 | 15 | 75.8 | 10 | 10 | 5 | 5 |
| June 27. | 950 | 10 | 76.6 |  | 10 | 10 |  |
| June 28 | 830 | 370 | 76.3 |  | 120 | 370 | 250 |
| June 30 | 815 | 35 | 76.6 | 5 | 20 | 30 | 15 |
| Total |  | 12,090 |  | 5,400 | 4,585 | 6,690 | 7,505 |
| Average |  |  | 81.0 |  |  |  |  |

Table 31.-Wool top futures: Open contracts, volume of trading, and average price, daily, by futures, Sept. 1, 1936, to June 30, 1938-Continued

1938 AUGUST FUTURE

| Date | Open contracts | Volume of trading | A verage price per pound | Longs |  | Shorts |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Purchases | Sales | Purchases | Sales |
| Apr. 5------ | $\begin{gathered} 1,000 \mathrm{lb} . \\ \text { i0 } \end{gathered}$ | 1,000 lb. ${ }_{10}$ | Cents 76.5 | 1,000 lb. | 1,000 lb. | 1,000 lb. | 1,000 lb ${ }^{\text {i }}$ |
| Apr. 20 |  | 10 | 79.5 |  | 10 | 10 |  |
| May 21 | 5 | 5 | 77.0 | 5 | - |  | ${ }^{5}$ |
| May 28 | 10 | 10 | 74.3 73.0 | 10 |  | 5 | 10 |
| May 31 | 25 | 5 | 72.8 | 5 |  |  | 5 |
| June 27 | 25 | 10 | 77.8 | 10 | 10 |  |  |
| Total.- |  | 60 |  | 45 | 20 | 15 | 40 |
| Average |  |  | 76.0 |  |  |  |  |

1938 SEPTEMBER FUTURE


1938 OCTOBER FUTURE

| 1937 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nov. 1.- | 25 | 25 | 91.5 | 25 |  |  | 25 |
| Nov. 4 | 30 | 5 | 87.0 | 5 |  |  | 5 |
| Nov. 5. | 35 | 15 | 83.0 | 15 | 10 |  | 5 |
| Nov. 6 | 60 | 25 | 83.5 | 25 |  |  | 25 |
| Nov. 8 | 260 | 215 | 81.3 | 210 | 10 | 5 | 205 |
| Nov. 9 | 260 | 30 | 82.8 | 30 | 30 |  |  |
| Nov. 10 | 285 | 90 | 84.1 | 90 | 65 |  | 25 |
| Nov. 12 | 305 | 20 | 84.6 | 20 |  |  | 20 |
| Nov. 13 | 315 | 15 | 83.3 | 15 | 5 |  | 10 |
| Nov. 15 | 365 | 50 | 82.0 | 50 |  |  | 50 |
| Nov. 16 | 385 | 30 | 81.6 | 25 | 5 | 5 | 25 |
| Nov. 17 | 440 | 85 | 81.0 | 55 |  | 30 | 85 |
| Nov. 18 | 490 | 50 | 81.2 | 50 |  |  | 50 |
| Nov. 19 | 550 | 235 | 79.4 | . 130 | 70 | 105 | 165 |
| Nov. 20. | 600 | 55 | 76.9 | 50 |  | 5 | 55 |
| Nov. 22 | 725 | 180 | 74.9 | 145 | 20 | 35 | 160 |
| Nov. 23 | 790 | 85 | 74.8 | 85 | 20 |  | 65 |
| Nov. 24 | 895 | 150 | 75.3 | 145 | 40 | 5 | 110 |
| Nov. 26 | 920 | 100 | 77.3 | 55 | 30 | 45 | 70 |
| Nov. 27 | 920 | 30 | 80.6 | 10 | 10 | 20 | 20 |
| Nov. 29 | 955 | 170 | 80.4 | 130 | 95 | 40 | 75 |
| Nov. 30 | 965 | 20 | 80.8 | 10 |  | 10 | 20 |
| Dec. 1 | 995 | 40 | 79.7 | 40 | 10 |  | 30 |
| Dec. 2 | 1,025 | 30 | 79.0 | 30 |  |  | 30 |
| Dec. 3 | 1,040 | 40 | 80.5 | 20 | 5 | 20 | 35 |
| Dec. 4 | 1,065 | 55 | 81.9 | 35 | 10 | 20 | 45 |
| Dec. 6 | 1, 085 | 100 | 84.2 | 50 | 30 | 50 | 70 |
| Dec. 7 | 1,145 | 95 | 82.1 | 95 | 35 |  | 60 |
| Dec. 8 | 1,160 | 20 | 83.2 | 15 |  | 5 | 20 |
| Dec. 9 | 1,170 | 110 | 84.6 | 75 | 65 | 35 | 45 |
| Dec. 10 | 1,155 | 9.5 | 84.3 | 60 | 75 | 35 | 20 |
| Dec. 11 | 1,140 | 20 | 85.0 |  | 15 | 20 | 5 |
| Dec. 13 | 1,180 | 145 | 84.8 | 60 | 20 | 85 | 125 |
| Dec. 14 | 1,165 | 145 | 85.7 | 35 | 50 | 110 | 95 |
| Dec. 15 | 1,065 | 135 | 85.1 | 25 | 125 | 110 | 10 |
| Dec. 16 | 1,090 | 40 | 83.1 | 35 | 10 | 5 | 30 |
| Dec. 17 | 1,090 | 155 | 81.5 | 115 | 115 | 40 | 40 |
| Dec. 18 | 1,130 | 40 | 82.7 | 40 |  |  | 40 |
| Dec. 20 | 1,105 | 70 | 82.2 | 30 | 55 | 40 | 15 |
| Dec. 21 | 1,175 | 145 | 82.3 | 125 | 55 | 20 | 90 |
| Dec. 22 | 1,175 | 65 | 83.0 | 30 | 30 | 35 | 35 |
| Dec. 23 | 1,200 | 75 | 82. 4 | 40 | 15 | 35 | 60 |
| Dec. 24 | 1,195 | 15 | 82.7 | 10 | 15 | 5 |  |
| Dec. 28 | 1, 210 | 85 | 83.3 | 45 | 30 | 40 | 55 |

Table 31.-Wool top futures: Open contracts, volume of trading, and average price, daily, by futures, Sept. 1, 1936, to June 30, 1938-Continued

1938 OCTOBER FUTURE-Continued

| Date | Open contracts | Volume of trading | Average price per pound | Longs |  | Shorts |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Purchases | Sales | Purchases | Sales |
| 1937 | 1,000 lb. | 1,000 lb. | Cents | $1,000 \mathrm{lb} .$ | 1,000 lb. | 1,000 lb. | $1,000 \mathrm{lb}$ |
| Dec. 29 | $1,215$ | $85$ | 82.8 | $40$ | 35 | $45$ | $50$ |
| Dec. 30- | 1,285 | 95 | 82.2 | 80 | 10 | 15 | 85 |
| Dec. 31-- | 1,340 | 60 | 82.5 | 55 |  | 5 | 60 |
| 1938 |  |  |  |  |  |  |  |
| Jan. 3 - | 1,415 | 90 | 80.9 | 80 | 5 | 10 | 85 |
| Jan. 4 | 1,480 | 125 | 80.4 | 85 | 20 | 40 | 105 |
| Jan. 5 | 1,505 | 25 | 81.1 | 25 |  |  | 25 |
| Jan. 6 | 1,510 | 50 | 80.5 | 45 | 40 | 5 | 10 |
| Jan. 7 | 1,510 | 55 | 80.4 | 35 | 35 | 20 | 20 |
| Jan. 8 | 1,575 | 165 | 79.7 | 120 | 55 | 45 | 110 |
| Jan. 10 | 1,645 | 205 | 79.0 | 75 | 5 | 130 | 200 |
| Jan. 11 | 1,790 | 240 | 78.1 | 170 | 25 | 70 | 215 |
| Jan. 12 | 1,795 | 20 | 78.9 | 20 | 15 |  | 5 |
| Jan. 13 | 1, 780 | 15 | 78.9 |  | 15 | 15 |  |
| Jan. 14 | 1,920 | 245 | 78.3 | 160 | 20 | 85 | 225 |
| Jan. 15 | 1,915 | 45 | 78.0 | 5 | 10 | 40 | 35 |
| Jan. 17 | 1,905 | 45 | 78.0 | 35 | 45 | 10 |  |
| Jan. 18 | 1,905 | 80 | 79.4 | 50 | 50 | 30 | 30 |
| Jan. 19 | 1,930 | 45 | 78.8 | 45 | 20 |  | 25 |
| Jan. 20 | 1,930 | 55 | 78.3 | 40 | 40 | 15 | 15 |
| Jan. 21 | 1,910 | 25 | 78.5 | 5 | 25 | 20 |  |
| Jan. 22 | 1,905 | 15 | 78.0 | 5 | 10 | 10 | 5 |
| Jan. 24 | 1,915 | 15 | 78.0 | 15 | 5 |  | 10 |
| Jan. 25 | 1,880 | 105 | 77.1 | 50 | 85 | 55 | 20 |
| Jan. 26 | 1,910 | 75 | 76.1 | 70 | 40 | 5 | 35 |
| Jan. 27 | 1,915 | 95 | 75.3 | 55 | 50 | 40 | 45 |
| Jan. 28 | 1,925 | 165 | 75.1 | 25 | 15 | 140 | 150 |
| Jan. 29 | 1,955 | 60 | 77.2 | 60 | 30 |  | 30 |
| Jan. 31 | 1,960 | 20 | 75.6 | 20 | 15 |  | 5 |
| Feb. 1 | 1,965 | 10 | 75.8 | 10 | 5 |  | 5 |
| Feb. 3 | 1,985 | 90 | 75.0 | 65 | 45 | 25 | 45 |
| Feb. 4 | 2,000 | 20 | 75.0 | 15 |  | 5 | 20 |
| Feb. 5 | 2,005 | 10 | 74.6 | 10 | 5 |  | 5 |
| Feb. 7 | 2,005 | 55 | 74.1 | 40 | 40 | 15 | 15 |
| Feb. 8 | 2,065 | 85 | 74.0 | 70 | 10 | 15 | 75 |
| Feb. 9 | 2,070 | 20 | 73.8 | 15 | 10 | 5 | 10 |
| Feb. 10 | 2,160 | 160 | 72.8 | 130 | 40 | 30 | 120 |
| Feb. 11 | 2, 210 | 75 | 73.3 | 60 | 10 | 15 | 65 |
| Feb. 14 | 2, 400 | 265 | 72.5 | 235 | 45 | 30 | 220 |
| Feb. 15 | 2, 445 | 125 | 72.9 | 75 | 30 | 50 | 95 |
| Feb. 16 | 2, 445 | 185 | 73.1 | 80 | 80 | 105 | 105 |
| Feb. 17 | 2, 480 | 275 | 74.7 | 155 | 120 | 120 | 155 |
| Feb. 18 | 2, 545 | 650 | 77.5 | 415 | 350 | 235 | 300 |
| Feb. 19 | 2, 630 | 145 | 75.7 | 145 | 60 |  | 85 |
| Feb. 21 | 2, 620 | 135 | 75.3 | 70 | 80 | 65 | 55 |
| Feb. 23 | 2. 605 | - 40 | 75.9 | 20 | 35 | 20 | 5 |
| Feb. 24 | 2, 575 | 355 | 77.3 | 125 | 155 | 230 | 200 |
| Feb. 25 | 2, 480 | 230 | 78.0 | 45 | 140 | 185 | 90 |
| Feb. 26 | 2, 430 | 145 | 79.4 | 45 | 95 | 100 | 50 |
| Feb. 28 | 2, 480 | 170 | 78.6 | 120 | 70 | 50 | 100 |
| Mar. 1 | 2, 470 | 285 | 78.6 | 145 | 155 | 140 | 130 |
| Mar. 2 | 2, 515 | 120 | 77.5 | 80 | 35 | 40 | 85 |
| Mar. 3 | 2,520 | 25 | 77.3 | 10 | 5 | 15 | 20 |
| Mar. 4 | 2,490 | 50 | 77.0 | 20 | 50 | 30 |  |
| Mar. 5 | 2, 480 | 10 | 77.1 |  | 10 | 10 |  |
| Mar. 7 | 2, 480 | 5 | 77.0 |  |  | 5 | 5 |
| Mar. 8 | 2, 450 | 60 | 76. 4 | 20 | 50 | 40 | 10 |
| Mar. 9 | 2, 440 | 190 | 75.7 | 120 | 130 | 70 | 60 |
| Mar. 10 | 2, 450 | 25 | 75.6 | 15 | 5 30 | 10 | 20 30 |
| Mar. 11 | 2, 460 | 60 | 76.1 | 40 | 30 30 | 20 15 | 30 |
| Mar. 12 | 2, 445 | 30 | 77.5 | 15 | 30 | 15 |  |
| Mar. 14 | 2, 445 | 40 | 78.0 | 10 | 10 | 30 | 30 |
| Mar. 15 | 2,485 | 150 | 76.7 | 95 | 55 | 55 | 95 |
| Mar. 16 | 2, 405 | 115 | 76.9 | 15 | 95 20 | 100 20 | 20 5 |
| Mar. 17 | 2, 390 | 25 70 | 76.6 76.9 | 5 15 | 20 5 | 20 50 | 5 65 |
| Mar. 18 | 2,400 | 70 | 76.9 | 15 | $\begin{array}{r}5 \\ 80 \\ \hline\end{array}$ | 55 65 | 65 |
| Mar. 19 | 2, 335 | 80 | 77.0 | 15 | 80 90 | 65 | ---------- |
| Mar. 21 | 2, 300 | 90 | 77.2 | 55 | 90 | 35 | 10 |
| Mar. 22 | 2,305 | 30 | 77.5 | 25 | 20 | 5 | 10 |
| Mar. 23 | 2, 310 | 85 | 76.9 | 35 | 30 | 50 | 55 |
| Mar. 24 | 2,295 | 130 | 76.9 | 10 | 25 | 120 | 105 |
| Mar. 25 | 2,310 | 25 | 77.3 | 25 | 10 |  | 15 |
| Mar. 26 | 2,305 | 45 | 78.3 | 25 | 30 50 | 20 60 | 15 |
| Mar. 28 | $\stackrel{\text { 2, }}{2} 20$ | 125 | 78.5 | 65 | 50 25 | 60 165 | 75 140 |
| Mar. 29 | 2,295 2,250 | 165 155 | 78.5 78.2 |  | 25 45 | 165 155 | 140 110 |

Table 31.-Wool top futures: Open contracts, volume of trading, and average price, daily, by futures, Sept. 1, 1936, to June 30, 1938-Continued

1938 OCTOBER FUTURE-Continued

\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow{2}{*}{Date} \& \multirow{2}{*}{Open contracts} \& \multirow[b]{2}{*}{Volume of trading} \& \multirow[t]{2}{*}{Average price per pound} \& \multicolumn{2}{|c|}{Longs} \& \multicolumn{2}{|l|}{Shorts ${ }^{\text {' }}$} <br>
\hline \& \& \& \& Purchases \& Sales \& Purchases \& Sales <br>
\hline $$
\begin{array}{r}
1938 \\
\text { Mar. } 31
\end{array}
$$ \& $$
\begin{gathered}
1,000 \mathrm{lb} . \\
2,620
\end{gathered}
$$ \& $$
\begin{gathered}
1,000 \mathrm{lb} . \\
575
\end{gathered}
$$ \& Cents 76.5 \& 1,000

3900 \& $$
\underset{20}{ }
$$ \& \[

$$
\begin{gathered}
1,000 \mathrm{lb} . \\
185
\end{gathered}
$$

\] \& \[

$$
\begin{gathered}
1,000 \mathrm{lb} . \\
555
\end{gathered}
$$
\] <br>

\hline Apr. 1 \& 2, 625 \& 35 \& 76.7 \& 5 \& \& 30 \& 35 <br>
\hline Apr. 2 \& 2, 625 \& 5 \& 77.3 \& \& \& 5 \& 5 <br>
\hline Apr. 4 \& 2,640 \& 50 \& 76.6 \& 20 \& 5 \& 30 \& 45 <br>
\hline Apr. 5 \& 2, 630 \& 35 \& 76. 6 \& ${ }_{0}^{0}$ \& 15 \& 30 \& 20 <br>
\hline Apr. 6 \& 2, 635 \& 45 \& 76.3 \& 10 \& 5 \& 35 \& 40 <br>
\hline Apr. 7 \& 2, 635 \& 5 \& 76.4 \& 5 \& 5 \& \& <br>
\hline Apr. 8 \& 2, 635 \& 35 \& 77.3 \& 10 \& 10 \& 25 \& 25 <br>
\hline Apr. 9 \& $\stackrel{2}{2} 705$ \& 80 \& 78.0 \& 70 \& \& 10 \& 80 <br>
\hline Apr. 11 \& 2, 720 \& 50 \& 77.9 \& 40 \& 25 \& 10 \& 25 <br>
\hline Apr. 12 \& 2,785 \& 105 \& 77.5 \& 85 \& 20 \& 20 \& 85 <br>
\hline Apr. 13- \& ${ }_{2}^{2,815}$ \& 55 \& 77.8 \& 30 \& \& 25 \& ${ }_{20}^{55}$ <br>
\hline Apr. 14--- \& 2,790
2,740 \& 70
170 \& 78.6
79.7 \& 25 \& 50
110 \& 45
110 \& ${ }_{60}^{20}$ <br>
\hline Apr. 19- \& 2, 740 \& 15 \& 79.2 \& 5 \& 5 \& 10 \& 10 <br>
\hline Apr. 20 \& 2, 735 \& 50 \& 79.6 \& 40 \& 45 \& 10 \& 5 <br>
\hline Apr. 21 \& 2,750 \& 70 \& 79.6 \& 35 \& 20 \& 35 \& 50 <br>
\hline Apr. 22 \& 2, 745 \& 35 \& 79.7 \& 5 \& 10 \& 30 \& 25 <br>
\hline Apr. 23 \& 2,730 \& 115 \& 79.4 \& 35 \& 50 \& 80 \& 65 <br>
\hline Apr. 25 \& 2,730 \& 5 \& 79.5 \& \& \& 5 \& 5 <br>
\hline Apr. 26 \& 2, 720 \& 10 \& 79.4 \& \& 10 \& 10 \& <br>
\hline Apr. 27 \& 2,735 \& 60 \& 78.9 \& 25 \& 10 \& 35 \& 50 <br>
\hline Apr. 28 \& 2,745
2,745 \& 40 \& 78.5
78.1 \& 25 \& ${ }_{25}^{10}$ \& ${ }_{15}^{20}$ \& 30
15 <br>
\hline Apr. 30 \& 2, 750 \& 35 \& 77.7 \& 10 \& 5 \& 25 \& 30 <br>
\hline May 2 \& 2,750 \& 25 \& 77.4 \& 15 \& 15 \& 10 \& 10 <br>
\hline May 3 \& 2,785 \& 100 \& 76.8 \& 85 \& 50 \& 15 \& 50 <br>
\hline May 4 \& 2,770 \& 80 \& 76.4 \& 45 \& 60 \& 35 \& 20 <br>
\hline May 5 \& 2,770 \& 5 \& 76.9 \& 5 \& 5 \& \& <br>
\hline May 6 \& 2,795 \& 80 \& 76.8 \& 70 \& 45 \& 10 \& 35 <br>
\hline May 7 \& 2,795 \& 20 \& 77.3 \& 10 \& 10 \& 10 \& 10 <br>
\hline May 9. \& 2, 795 \& 10 \& 77.0 \& \& \& 10 \& 10 <br>
\hline May 10.- \& 2,800
2,810 \& 10
50 \& 77.0
76.4 \& 5
40 \& 30 \& ${ }_{10}^{5}$ \& 10
20 <br>
\hline May 13 \& 2, 810 \& 35 \& 76.1 \& 25 \& 25 \& 10 \& 10 <br>
\hline May 14- \& 2,810 \& 15 \& 76.1 \& \& \& 15 \& 15 <br>
\hline May 16 \& 2, 845 \& 40 \& 76.0 \& 35 \& \& 5 \& 40 <br>
\hline May 17 \& 2, 855 \& 30 \& 76.0 \& 15 \& - \& 15 \& 25 <br>
\hline May 18-- \& $\stackrel{\text { 2, }}{ } 870$ \& 45 \& 75.3 \& 35 \& 20 \& 10 \& 25
25 <br>
\hline May 20.- \& $\stackrel{\text { 2, }}{270}$ \& 10 \& 75.0 \& 10 \& 10 \& \& <br>
\hline May 21 \& 2,890 \& 85 \& 75.0 \& 20 \& \& 65 \& 85 <br>
\hline May 23 \& 2,900 \& 25 \& 74.5 \& 10 \& \& 15 \& 25 <br>
\hline May 24 \& 2,920 \& 65 \& 74.3 \& 35 \& 15 \& 30 \& 50 <br>
\hline May 25 \& 2,925 \& 10 \& 74.2 \& 5 \& \& 5 \& 10 <br>
\hline May 26 \& $\stackrel{+}{2,930}$ \& 25
95 \& 74.7 \& 15 \& 10 \& 15
80 \& 8 <br>
\hline May 28 \& 2,965 \& 30 \& 74.0 \& 30 \& \& \& 30 <br>
\hline May 31 \& 2,980 \& 30 \& 74.8 \& 20 \& 5 \& 10 \& 25 <br>
\hline June 2 \& 2,985 \& 60 \& 73.9 \& 5 \& \& 55 \& 60 <br>
\hline June 3 \& 3, 030 \& 45 \& 73.0 \& 45 \& \& \& 45 <br>
\hline June 4 \& 3,030 \& 5 \& 72.8 \& \& \& 5 \& 5 <br>
\hline June 6 \& 3, 025 \& 10 \& 74.0 \& -- \& 5 \& 10 \& 5 <br>
\hline June 7 \& 2,985 \& 40 \& 73.7 \& \& 40 \& 40 \& <br>
\hline June 9 \& 2,970 \& 25 \& 73.5 \& 10 \& 25 \& 15 \& <br>
\hline June 10 \& 2, 995 \& 95 \& 74.0 \& 50 \& 25 \& 45 \& 70 <br>
\hline June 11-1 \& 2,980 \& 25 \& 74.0 \& \& 15 \& 25 \& 10 <br>
\hline June 13- \& 2,970 \& 35 \& 73.7 \& \& 10 \& 35
20 \& 25 <br>
\hline June 14-- \& 2,970
2,985 \& 20 \& 73.4 \& 15 \& \& 20 \& 15 <br>
\hline June 16 \& 2,975 \& 20 \& 73.7 \& \& 10 \& 20 \& 10 <br>
\hline June 17 \& 2,980 \& 25 \& 73.4 \& 10 \& 5 \& 15 \& 20 <br>
\hline June 20 \& 2,970 \& 55 \& 73.6 \& 5 \& 15 \& 50 \& 40 <br>
\hline June 21 \& 2,910 \& 220 \& 75.6 \& 20 \& 80 \& 200 \& 140 <br>
\hline June 22 \& 2,820 \& 500 \& 76.8 \& 65 \& 155 \& 435 \& 345 <br>
\hline June 23 \& 2,825 \& 65 \& 76.3 \& 15 \& 10 \& 50 \& 55 <br>
\hline June 24 \& 2,765 \& 155 \& 77.5 \& 30 \& 90 \& 125 \& 65 <br>
\hline June 25 \& 2,775 \& 40 \& 77.6 \& 20 \& 10 \& 20 \& 30 <br>
\hline June 27 \& 2, 785 \& 80 \& 78.4 \& 70 \& 60 \& 10 \& 20 <br>
\hline June 28 \& $\stackrel{2}{2} 750$ \& 55 \& 77.2 \& 45 \& 55
50 \& 35 \& 30 <br>

\hline June 30 \& | 2, |
| :--- |
| 2,735 | \& 80

65 \& 77.1
78.2 \& 40 \& 50
50 \& ${ }_{25}^{35}$ \& 15 <br>
\hline Total \& ---- \& 15, 670 \& \& 8,665 \& 5,930 \& 7,005 \& 9,740 <br>
\hline Averag \& \& \& 77.9 \& \& \& \& <br>
\hline
\end{tabular}

Table 31.-Wool top futures: Open contracts, volume of trading, and average price, daily, by futures, Sept. 1, 1936, to June 30, 1938-Continued

1938 DECEMBER FUTURE ${ }^{4}$

| Date | Open contracts | Volume of trading | Average price per pound | Longs |  | Shorts |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Purchases | Sales | Purchases | Sales |
| Jan $6^{1938}$ | 1,000 lb. | $1,000 \mathrm{lb} .$ | Cents 80.5 | 1,000 lb. | 1,000 lb. | 1,000 lb. | 1,000 lb. |
| Jan. 7 | 45 | 20 | 80.8 | 20 |  |  | 20 |
| Jan. 10 | 95 | 55 | 79.0 | 55 | 5 |  | 50 |
| Jan. 11 | 180 | 100 | 78.2 | 85 |  | 15 | 100 |
| Jan. 12 | 215 | 35 | 78.7 | 35 |  |  | 35 |
| Jan. 13. | 210 | 10 | 78.5 |  | 5 | 10 | 5 |
| Jan. 14 | 265 | 90 | 78.4 | 75 | 20 | 15 | 70 |
| Jan. 15 | 270 | 5 | 77.9 | 5 |  |  | 5 |
| Jan. 17 | 275 | 10 | 77.8 | 10 | 5 |  | 5 |
| Jan. 18 | 295 | 20 | 79.5 | 20 |  |  | 20 |
| Jan. 19 | 355 | 70 | 79.2 | 60 |  | 10 | 70 |
| Jan. 20 | 385 | 40 | 78.0 | 30 |  | 10 | 40 |
| Jan. 21- | 400 | 25 | 78.5 | 15 |  | 10 | 25 |
| Jan. 22 | 450 | 50 | 78.0 | 50 |  |  | 50 |
| Jan. 24 | 470 | 20 | 78.0 | 20 |  |  | 20 |
| Jan. 25 | 500 | 50 | 77.3 | 35 | 5 | 15 | 45 |
| Jan. 26 | 525 | 80 | 76.0 | 70 | 45 | 10 | 35 |
| Jan. 27 | 555 | 50 | 75.5 | 45 | 15 | 5 | 35 |
| Jan. 28 | 630 | 85 | 75. 0 | 75 |  | 10 | 85 |
| Jan. 29 | 670 | 55 | 75.1 | 40 |  | 15 | 55 |
| Jan. 31 | 720 | 80 | 75.5 | 65 | 15 | 15 | 65 |
| Feb. 1 | 760 | 85 | 75.8 | 75 | 35 | 10 | 50 |
| Feb. 2 | 780 | 25 | 75.5 | 25 | 5 |  | 20 |
| Feb. 3 | 835 | 55 | 75.3 | 55 |  |  | 55 |
| Feb. 4 | 855 | 25 | 75.0 | 25 | 5 |  | 20 |
| Feb. 5 | 860 | 25 | 74.5 | 20 | 15 | 5 | 10 |
| Feb. 7 | 925 | 120 | 74.2 | 115 | 50 | 5 | 70 |
| Feb. 8 | 980 | 70 | 74.1 | 70 | 15 |  | 55 |
| Feb. 9 | 1, 040 | 110 | 73.9 | 100 | 40 | 10 | 70 |
| Feb. 10 | 1,130 | 165 | 73.2 | 90 |  | 75 | 165 |
| Feb. 11 | 1,180 | 50 | 72.6 | 50 |  |  | 50 |
| Feb. 14 | 1,535 | 385 | 72.5 | 355 |  | 30 | 385 |
| Feb. 15 | 1,590 | 65 | 72.7 | 55 |  | 10 | 65 |
| Feb. 16 | 1,615 | 85 | 73.2 | 65 | 40 | 20 | 45 |
| Feb. 17 | 1,570 | 200 | 74.8 | 100 | 145 | 100 | 55 |
| Feb. 18 | 1, 620 | 440 | 77.5 | 335 | 285 | 105 | 155 |
| Feb. 19 | 1, 625 | 50 | 75.2 | 20 | 15 | 30 | 35 |
| Feb. 21 | 1,725 | 235 | 75.3 | 195 | 95 | 40 | 140 |
| Feb. 23 | 1,755 | 75 | 75.5 | 70 | 40 | 5 | 35 |
| Feb. 24 | 1,730 | 105 | 77.4 | 60 | 85 | 45 | 20 |
| Feb. 25 | 1,610 | 190 | 77.9 | 15 | 135 | 175 | 55 |
| Feb. 26 | 1,540 | 195 | 79.4 | 55 | 125 | 140 | 70 |
| Feb. 28 | 1,550 | 190 | 78.3 | 135 | 125 | 55 | 65 |
| Mar. 1 | 1,545 | 25 | 78.4 | 15 | 20 | 10 | 5 |
| Mar. 2 | 1,545 | 50 | 77.5 | 50 | 50 |  |  |
| Mar. 3 | 1,540 | 40 | 77.4 | 25 | 30 | 15 | 10 |
| Mar. 4 | 1,525 | 45 | 77.1 | 20 | 35 | 25 | 10 |
| Mar. 5 | 1,525 | 15 | 77.0 | 5 | 5 | 10 | 10 |
| Mar. 7 | 1, 555 | 50 | 77.0 | 50 | 20 |  | 30 |
| Mar. 8 | 1, 505 | 85 | 76.7 | 20 | 70 | 65 | 15 |
| Mar. 9 | 1,510 | 140 | 75.8 | 75 | 70 | 65 | 70 |
| Mar. 10 | 1,585 | 95 | 75.5 | 80 | 5 | 15 | 90 |
| Mar. 11 | 1,600 | 35 | 76.2 | 35 | 20 |  | 15 |
| Mar. 12 | 1,590 | 55 | 77.5 | 45 | 55 | 10 |  |
| Mar. 14 | 1,640 | 105 | 77.8 | 100 | 50 | 5 | 55 |
| Mar. 15 | 1,620 | 115 | 76.3 | 75 | 95 | 40 | 20 |
| Mar. 16 | 1,600 | 40 | 76.5 | 10 | 30 | 30 | 10 |
| Mar. 17 | 1,590 | 25 | 76.5 | 15 | 25 | 10 |  |
| Mar. 18 | 1,620 | 80 | 77.1 | 50 | 20 | 30 | 60 |
| Mar. 19 | 1,620 | 40 | 77.1 | 40 | 40 |  |  |
| Mar. 21 | 1,645 | 50 | 77.3 | 25 |  | 25 | 50 5 |
| Mar. 22 | 1,635 | 20 | 77.5 | 5 | 15 | 15 | 5 |
| Mar. 23 | 1,570 | 225 | 77.0 | 60 | 125 | 165 | 100 |
| Mar. 24 | 1,545 | 80 | 76.7 | 15 | 40 | 65 | 40 |
| Mar. 25. | 1,545 | 10 | 77.5 | 10 | 10 |  |  |
| Mar. 26 | 1,420 | 140 | 78.1 | 5 | 130 | 135 | 10 |
| Mar. ${ }^{\text {Mar. }} 29$ | 1,440 | 60 | 78.5 | 35 | 15 | 25 130 | 85 |
| Mar. ${ }^{\text {Mar. }} 30$ | 1,395 | 150 | 78.3 | 20 | 65 | 130 90 | 85 |
| Mar. 30- | 1,350 | 90 | 78.1 |  | 45 | 90 30 | 45 60 |
| Mar. 31 | 1,380 1,395 | 65 30 | 77.7 76.6 | 15 | 5 | 30 15 | 60 30 |
| Apr. 2 | 1, 420 | 30 | 77.0 | 25 |  | 5 | 30 |
| Apr. 4 | 1,420 | 40 | 76.8 | 10 | 10 | 30 | 30 |
| Apr. 5....-- | 1,485 | 105 | 76.5 | 75 | 10 | 30 | 95 |

4 Includes 5,000 pounds of uncleared "curb" trades in February 1938.

Table 31.-Wool top futures: Open contracts, volume of trading, and average price, daily, by futures, Sept. 1, 1936, to June 30, 1938-Continued

1938 DECEMBER FUTURE-Continued

| Date | Open contracts | Volume of trading | A verage price per pound | Longs |  | Shorts |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Purchases | Sales | Purchases | Sales |
| 1938 | 1,000 lb. | 1,000 lb. | Cents | 1,000 lb. | 1,000 lb. | 1,000 lb. | 1,000 lb. |
| Apr. 6 ------ | 1,485 1,500 | $\begin{aligned} & 40 \\ & 40 \end{aligned}$ | 77.6 | $\begin{aligned} & 15 \\ & 20 \end{aligned}$ | $\begin{array}{r} 15 \\ 5 \end{array}$ | $\begin{aligned} & 25 \\ & 20 \end{aligned}$ | 25 35 |
| Apr. 9-- | 1,500 | 110 | 77.8 | 100 | 100 | 10 | 10 |
| Apr. 11 | 1,515 | 45 | 78.0 | 15 |  | 30 | 45 |
| A pr. 12 | 1,515 | 5 | 78.0 | 5 | 5 |  |  |
| Apr. ${ }^{13}$ | 1,550 | 40 | 78.1 | 35 |  | 5 | 40 |
| Apr. 14 | 1,575 | 125 | 78.9 | 70 | 45 | 55 | 80 |
| Apr. 18 | 1,565 | 190 | 80.0 | 115 | 125 | 75 | 65 |
| Apr. 19--- | 1,580 | 40 110 | 79.5 | 35 | 20 | 5 | 20 |
| Apr. 20 <br> Apr. 21 | 1,670 | 110 50 | 79.7 79.3 | 105 15 | 15 45 | $\begin{array}{r}5 \\ 35 \\ \hline\end{array}$ | 95 5 5 |
| Apr. 22 | 1,675 | 50 | 79.9 | 40 | 5 | 10 | 45 |
| Apr. 23 | 1,705 | 125 | 79.5 | 60 | 30 | 65 | 95 |
| Apr. 25 | 1,755 | 55 | 79.6 | 50 |  | 5 | 55 |
| Apr. 26 | 1,805 | 55 | 79.5 | 55 | 5 |  | 50 |
| Apr. 27 | 1, 865 | ${ }_{80}^{65}$ | 79.1 78.8 | 60 |  | 5 | 65 |
| Apr. 29 | 1,900 | 85 | 78.4 | 50 | 10 | 20 5 | 15 45 |
| Apr. 30 | 1,930 | 85 | 78.0 | 75 | 45 | 10 | 40 |
| May 2 | 1,930 | 75 | 77.7 | 35 | 35 | 40 | 40 |
| May 3 | 1,955 | 155 | 77.2 | 55 | 30 | 100 | 125 |
| May 4 | 1,975 | 100 | 76.9 | 45 | 25 | 55 | 75 |
| May 5 | 2, 010 | 75 | 77.2 | 45 | 10 | 30 | 65 |
| May 6 | 2, 060 | 145 | 77.2 | 110 | 60 | 35 | 85 |
| May ${ }^{\text {M }}$ | $\stackrel{2,065}{2,065}$ | 70 | 77.4 | 25 | 25 | 15 45 | 20 |
| May 10 | 2,050 | 30 | 77.3 |  | 15 | 30 | 4 |
| May 11 | 2, 065 | 55 | 77.1 | 40 | 25 | 15 | 30 |
| May 12 | 2, 085 | 80 | 76.5 | 70 | 50 | 10 | 30 |
| May 13 | 2,160 | 135 | 76.4 | 95 | 20 | 40 | 115 |
| May 14 | 2,185 | 25 | 76. 2 | 25 |  |  | 25 |
| May 16 | 2, 200 | 35 | 76.3 | 20 | 5 | 15 | 30 |
| May 17 | 2,250 | 140 | 76.1 | 70 | 20 | 70 | 120 |
| May 19 | 2, 290 | 85 | 76.5 | 80 | 45 | 10 | 15 |
| May 20 | 2, 300 | 55 | 75.5 | 30 | 20 | 25 | 35 |
| May 21. | 2,305 | 15 | 75.5 | 15 | 10 |  |  |
| May 23 | 2,360 | 85 | 75.0 | 55 |  | 30 | 85 |
| May 24 | 2,370 | 55 | 74.7 | 25 | 15 | 30 | 40 |
| May 25. | 2. 370 | 35 | 74.7 | 15 | 15 | 20 | 20 |
| May 27 | $\stackrel{\text { 2, }}{2,415}$ | 65 55 | 75.0 74.6 | 65 35 | 40 | 20 | 25 40 |
| May 28 | 2, 415 | 5 | 74.6 | 5 | 5 | 2 | 40 |
| May 31 | 2, 425 | 100 | 74.0 | 25 | 15 | 75 | 85 |
| June 1 | 2, 435 | 20 | 74.3 | 15 | 5 | 5 | 15 |
| June 2.- | 2, 555 | 195 | 74.0 | 150 | 30 | 45 | 165 |
| June 3 | 2, 605 | 80 | 73.4 | 55 | 5 | 25 | 75 |
| June 4 | 2, 545 | 80 | 73.8 | 5 | 65 | 75 | 15 |
| June 6 | 2. 550 | 35 | 74.0 | 15 | 10 | 20 | 25 |
| June 7 | 2, 565 | 25 | 74.3 | 25 | 10 |  | 15 |
| June 8 | 2,550 | 55 | 74.5 |  | 15 | 55 | 40 |
| June 9 | 2,600 | 120 | 74.1 | 80 | 30 | 40 | 90 |
| June 10 | 2, 600 | 60 | 74.6 | 15 | 15 | 45 | 45 |
| June 13 | 2, 595 | 30 | 74.0 | 15 | 20 | 15 | 10 |
| June 14 | 2, 610 | 45 | 73.9 | 30 | 15 | 15 | 30 |
| June 15 | 2, 590 | 45 | 74.0 |  | 20 | 45 | 25 |
| June 16 | 2, 625 | 110 | 74.0 | 35 |  | 75 | 110 |
| June 17 | 2, 625 | 20 | 73.7 | 10 | 10 | 10 | 10 |
| June 20 | 2, 645 | 55 | 74.0 | 20 |  | 35 | 55 |
| June 21 | 2, 640 | 165 | 75.4 | 70 | 75 | 95 | 90 |
| June 22 | 2, 605 | 340 | 76.8 | 65 | 100 | 275 | 240 |
| June 23 | $\stackrel{\text { 2, }}{ } 610$ | 50 | 76.8 | 35 | 30 | 15 | 20 |
| June 24 | 2, 475 | 320 | 77.7 | 95 | 230 | 225 | 90 |
| June 25 | 2,475 | 70 | 77.8 | 25 | 25 | 45 | 45 |
| June 27 | 2, 535 | 165 | 78.7 | 140 | 80 | 25 | 85 |
| June 28 | 2. 610 | 480 | 77.9 | 180 | 105 | 300 | 375 |
| June 29 | 2, 625 | 135 | 77.9 | 20 | 5 | 115 | 130 100 |
| June 30 | 2. 670 | 125 | 78.4 | 70 | 25 | 55 | 100 |
| Total |  | 11, 955 |  | 7, 110 | 4,440 | 4,845 | 7,515 |
| Averas |  |  | 76.7 |  |  |  |  |

Table 31.-Wool top futures: Open contracts, volume of trading, and average price, daily, by futures, Sept. 1, 1936, to June 30, 1938-Continued

1939 JANUARY FUTURE

| Date | Open contracts | Volume of trading | Average price per pound | Longs |  | Shorts |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Purchases | Sales | Purchases | Sales |
| $1938$ <br> Feb. 10 | $1,000 \mathrm{lb} .{ }_{5}$ | $1,000 \mathrm{lb} ._{5}$ | Cents $73.0$ | 1,000 lb ${ }_{5}$ | 1,000 lb. | 1,000 lb. | ${ }_{1,000} \mathrm{lb}$. |
| Total |  | 5 |  | 5 |  |  | 5 |
| Average |  |  | 73.0 |  |  | ------------ |  |

1939 MARCH FUTURE

| 19.98 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| April 1--- | 25 | 25 | 76.9 | 25 |  |  | 25 |
| April 2 | 25 | 10 | 77.0 |  |  | 10 | 10 |
| April 4 | 35 | 10 | 76.8 | 10 |  |  | 10 |
| April 5 | 60 | 25 | 76.8 | 25 |  |  | 25 |
| April 7-- | 75 | 15 | 76.5 | 15 |  |  | 15 |
| April 9 | 120 | 55 | 78.0 | 50 | 5 | 5 | 50 |
| April 12 | 125 | 5 | 78.0 | 5 |  |  | 5 |
| April 14 | 180 | 55 | 78.5 | 55 |  |  | 55 |
| April 18 | 225 | 80 | 79.8 | 70 | 25 | 10 | 55 |
| April 19 | 225 | 10 | 79.4 |  |  | 10 | 10 |
| April 20 | 225 | 20 | 79.6 |  |  | 20 | 20 |
| April 21 | 275 | 65 | 79.8 | 50 |  | 15 | 65 |
| April 23 | 285 | 10 | 79.5 | 10 |  |  | 10 |
| April 25 | 300 | 15 | 79.5 | 15 |  |  | 15 |
| April 26 | 335 | 35 | 79.5 | 35 |  |  | 35 |
| April 27 | 380 | 70 | 79.2 | 70 | 25 |  | 45 |
| April 28 | 385 | 5 | 78.8 | 5 |  |  | 5 |
| April 29 | 380 | 5 | 78.2 |  | 5 | 5 |  |
| April 30 | 400 | 30 | 78.0 | 30 | 10 |  | 20 |
| May 3. | 405 | 5 | 77.5 | 5 |  |  | 5 |
| May 4 | 455 | 60 | 76.9 | 50 |  | 10 | 60 |
| May 5 | 525 | 75 | 77.4 | 75 | 5 |  | 70 |
| May 6 | 570 | 100 | 77.1 | 45 |  | 55 | 100 |
| May 7 | 570 | 10 | 77.3 | -- |  | 10 | 10 |
| May 9 | 570 | 5 | 77.3 |  |  | 5 | 5 |
| May 10 | 595 | 40 | 77.2 | 25 |  | 15 | 40 |
| May 11 | 610 | 25 | 77.0 | 25 | 10 |  | 15 |
| May 12 | 650 | 60 | 76.5 | 50 | 10 | 10 | 50 |
| May 13 | 675 | 35 | 76.5 | 25 |  | 10 | 35 |
| May 14 | 690 | 35 | 76.4 | 30 | 15 | 5 | 20 |
| May 16 | 725 | 50 | 76.4 | 40 | 5 | 10 | 45 |
| May 17 | 735 | 125 | 76.1 | 55 | 45 | 70 | 80 |
| May 18 | 745 | 40 | 75.8 | 30 | 20 | 10 | 20 |
| May 19 | 725 | 110 | 75.9 | 40 | 60 | 70 | 50 |
| May 20 | 755 | 90 | 75.5 | 75 | 45 | 15 | 45 |
| May 21 | 805 | 50 | 75.5 | 50 |  |  | 50 |
| May 23 | 980 | 185 | 75.0 | 185 | 10 |  | 175 |
| May 24 | 1,145 | 240 | 74.9 | 185 | 20 | 55 | 220 |
| May 25 | 1,150 | 15 | 74.8 | 5 |  | 10 | 15 |
| May 26 | 1,150 | 40 | 75.0 | 15 | 15 | 25 | 25 |
| May 27 | 1,180 | 35 | 74.5 | 35 | 5 |  | 30 |
| May 28 | 1,215 | 40 | 74.6 | 40 | 5 |  | 35 |
| May 31 | 1,290 | 110 | 74.0 | 80 | 5 | 30 | 105 |
| June 1-- | 1,355 | 105 | 74.3 | 105 | 40 |  | 65 |
| June 2 | 1,425 | 105 | 74.1 | 75 | 5 | 30 | 100 |
| June 3 | 1,505 | 390 | 73.9 | 120 | 40 | 270 | 350 |
| June 4 | 1,520 | 25 | 73.2 | 15 |  | 10 | 25 |
| June 6 | 1,550 | 55 | 74.2 | 45 | 15 | 10 | 40 |
| June 7 | 1,515 | 75 | 74.3 | 5 | 40 | 70 | 35 |
| June 8 | 1,510 | 30 | 74.4 | 15 | 20 | 15 | 10 |
| June 9 | 1,560 | 75 | 74.1 | 55 | 5 | 20 | 70 |
| June 10 | 1,610 | 150 | 74.5 | 105 | 55 | 45 | 95 |
| June 11 | 1,630 | 20 | 74.4 | 20 |  |  | 20 |
| June 13 | 1,675 | 50 | 74.1 | 50 | 5 |  | 45 |
| June 14 | 1, 685 | 25 | 73.8 | 20 | 10 | 5 | 15 |
| June 15 | 1, 700 | 40 | 74.0 | 25 | 10 | 15 | 30 |
| June 16 | 1, 725 | 60 | 74.0 | 35 | 10 | 25 | 50 |
| June 17 | 1, 730 | 50 | 73.7 | 10 | 5 30 | 40 35 | 45 15 |
| June 18 | 1,710 | 45 75 | 73.6 73.9 | 10 70 | 30 40 | 35 5 | 15 35 |
| June 20.- | 1,740 1,820 | 75 175 | 73.9 75.4 | 70 130 | 40 50 | 5 45 | 35 125 |
| June 22..... | 1, 805 | 325 | 76.9 | 95 | 110 | 230 | 215 |

Table 31.-Wool top futures: Open contracts, volume of trading, and average price, daily, by futures, Sept. 1, 1936, to June 30, 1938—Continued

1939 MARCH FUTURE-Continued

| Date | Open contracts | Volume of trading | Average price per pound | Longs |  | Shorts |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Purchases | Sales | Purchases | Sales |
| 1938 | 1,000 lb. | 1,000 lb. | Cents | 1,000 lb. | 1,000 lb. | $1,000 \mathrm{lb}$. | 1,000 76. |
| June 23 | 1,860 | 165 | 76.6 | 120 | 1,000 65 | 1,000 45 | 1,000 100 |
| June 24 | 1, 840 | 270 | 77.8 | 90 | 110 | 180 | 160 |
| June 25 | 1,880 | 145 | 77.8 | 80 | 40 | 65 | 105 |
| June 27 | 1,965 | 185 | 78. 7 | 110 | 25 | 75 | 160 |
| June 28 | 2,005 | 270 | 78.2 | 115 | 75 | 155 | 195 |
| June 29 | 2,110 | 205 | 77.6 | 145 | 40 | 60 | 165 |
| June 30 | 2,130 | 165 | 78.7 | 140 | 120 | 25 | 45 |
| Total |  | 5, 405 |  | 3, 440 | 1,310 | 1,965 | 4.095 |
| Averag |  |  | 76.2 |  |  |  |  |

1939 MAY FUTURE

| 19.38 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| June 2 | 5 | 5 | 74. 2 | 5 |  |  | 5 |
| June 4 | 50 | 45 | 73.2 | 45 |  |  | 45 |
| June 6 | 105 | 60 | 74.0 | 60 | 5 |  | 55 |
| June 7 | 160 | 60 | 74.4 | 55 |  | 5 | 60 |
| June 9 | 165 | 20 | 74.0 | 5 |  | 15 | 20 |
| June 10 | 210 | 70 | 74.5 | 70 | 25 |  | 45 |
| June 11 | 210 | 5 | 74.4 | 5 | 5 |  |  |
| June 14 | 215 | 10 | 73.8 | 10 | 5 |  | 5 |
| June 16 | 225 | 20 | 74.0 | 20 | 10 |  | 10 |
| June 17- | 225 | 5 | 73.7 | 5 | 5 |  |  |
| June 20 | 225 | 5 | 74.0 | 5 | 5 |  |  |
| June 21 | 265 | 40 | 75.8 | 40 |  |  | 40 |
| June 22 | 270 | 5 | 76.5 | 5 |  |  | 5 |
| June 23 | 280 | 15 | 76.5 | 15 | 5 |  | 10 |
| June 24 | 305 | 25 | 78.0 | 25 |  |  | 25 |
| June 27 | 335 | 30 | 78.7 | 30 |  |  | 30 |
| June 28 | 150 | 210 | 78.0 | 15 | 200 | 195 | 10 |
| June 29 | 160 | 20 | 77.7 | 15 | 5 | 5 | 15 |
| June 30 | 160 | 20 | 78.4 | 10 | 10 | 10 | 10 |
| Total. |  | 670 |  | 440 | 280 | 230 | 390 |
| Averag |  |  | 76.1 |  |  |  |  |

Table 32.-Wool top futures: Volume of trading ${ }^{1}$ and open contracts, Sept. 1, 1936, to June 30, 1938
[In thousands of pounds]

${ }^{1}$ Purchases plus sales, including transferable notices.

Table 32.-Wool top futures: Volume of trading and open contracts, Sept. 1, 1936, to June 30, 1938—Continued
[In thousands of pounds]

| Date | Open contracts | Long accounts |  | Short accounts |  | Date | Open contracts | Long accounts |  | Short accounts |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Purchases | Sales | Purchases | Sales |  |  | Purchases | Sales | Purchases | Sales |
| 1937 |  |  |  |  |  | 1937 |  |  |  |  |  |
| Feb. 1 | 2, 940 | 5 |  | 10 | 15 | Apr. 21 | 3,190 |  | 10 | 10 |  |
| Feb. 2 | 3, 010 | 85 | 15 | 15 | 85 | Apr. 22 | 3, 190 | 5 | 5 | 25 | 25 |
| Feb. 3 | 2,995 |  | 15 | 55 | 40 | Apr. 23 | 3,220 | 40 | 10 | 10 | 40 |
| Feb. 4 | 2,995 | 25 | 25 | 25 | 25 | Apr. 24 | 3,275 | 55 |  |  | 55 |
| Feb. 5 | 2,995 | 10 | 10 |  |  | Apr. 26 | 3,265 | 85 | 95 | 130 | 120 |
| Feb. 6 | 3, 000 | 15 | 10 | 5 | 10 | Apr. 27 | 3, 150 | 175 | 290 | 230 | 115 |
| Feb. 8 | 3, 005 | 15 | 10 | 20 | 25 | Apr. 28 | 3,405 | 315 | 60 | 265 | 520 |
| Feb. 9 | 3, 005 | 75 | 75 | 30 | 30 | Apr. 29 | 3,425 | 45 | 25 | 65 | 85 |
| Feb. 10 | 3, 025 | 35 | 15 | 25 | 45 | Apr. 30 | 3,645 | 265 | 45 | 160 | 380 |
| Feb. 11 | 3, 115 | 110 | 20 | 10 | 100 |  |  |  |  |  |  |
| Feb. 13 | 3, 265 | 155 | 5 | 5 | 155 | Total |  | 1,540 | 1,415 | 1,665 | 1,790 |
| Feb. 15 | 3, 335 | 80 | 10 |  | 70 |  |  |  |  |  |  |
| Feb. 16 | 3, 370 | 40 | 5 | 35 | 70 | Averag | 3,373 | --- |  |  |  |
| Feb. 17 | 3, 375 | 50 | 45 | 35 | 40 |  |  |  |  |  |  |
| Feb. 18 | 3, 370 | 30 | 35 | 10 | 5 | May 1 | 3, 640 | 10 | 15 | 55 | 50 |
| Feb. 19 | 3, 365 | 40 | 45 | 20 | 15 | May 3 | 3, 650 | 10 |  | 45 | 55 |
| Feb. 20 | 3, 375 | 15 | 5 |  | 10 | May 4 | 3, 645 | 45 | 50 | 45 | 40 |
| Feb. 23 | 3, 370 |  | 5 | 20 | 15 | May 5 | 3,635 | 10 | 20 | 40 | 30 |
| Feb. 24 | 3, 340 | 10 | 40 | 35 | 5 | May 6 | 3,630 | 20 | 25 | 15 | 10 |
| Feb. 25 | 3, 340 |  |  | 35 | 35 | May 7 | 3, 620 | 5 | 15 | 25 | 15 |
| Feb. 26 | 3, 365 | 50 | 25 | 25 | 50 | May 8 | 3, 620 |  |  | 10 | 10 |
| Feb. 27---- | 3, 365 | 5 | 5 | 35 | 35 | May 10 | 3,625 | 25 | 20 | 10 | 15 |
|  |  |  |  |  |  | May 11 | 3,640 | 20 | 5 | 55 | 70 |
| Total.- |  | 850 | 420 | 450 | 880 | $\text { May } 12$ | 3, 655 | 40 | 25 | 40 | 55 |
|  |  |  |  |  |  | May 13 | 3, 665 | 35 | 25 | 50 | 60 |
| Average. | 3, 196 |  |  |  | -- | May 14 | 3, 730 | 130 | 65 | 85 | 150 |
|  |  |  |  |  |  | May 15 | 3, 710 | 10 | 30 | 65 | 45 |
| Mar. 1 | 3, 365 | 10 | 10 | 10 | 10 | May 17 | 3, 725 | 35 | 20 | 20 | 35 |
| Mar. 2 | 3, 370 | 10 | 5 | 5 | 10 | May 18 | 3, 730 | 35 | 30 | 30 | 35 |
| Mar. 3 | 3, 370 | 10 | 10 | 10 | 10 | May 19 | 3,800 | 90 | 20 |  | 70 |
| Mar. 4 | 3, 390 | 25 | 5 | 25 | 45 | May 20 | 3,850 | 105 | 55 | 35 | 85 |
| Mar. 5 | 3, 425 | 40 | 5 |  | 35 | May 21 | 3, 770 | 35 | 115 | 110 | 30 |
| Mar. 6 | 3, 415 | 5 | 15 | 15 | 5 | May 22 | 3,770 | 5 | 5 | 5 | 5 |
| Mar. 8 | 3,445 | 55 | 25 | 10 | 40 | May 24 | 3, 815 | 60 | 15 | 15 | 60 |
| Mar. 9 | 3, 435 | 45 | 55 | 10 |  | May 25 | 3,790 | 15 | 40 | 30 | 5 |
| Mar. 10 | 3, 430 | 65 | 70 | 10 | 5 | May 26 | 3, 845 | 60 | 5 | 50 | 105 |
| Mar. 11 | 3,425 | 25 | 30 | 30 | 25 | May 27 | 3,790 | 15 | 70 | 160 | 105 |
| Mar. 12 | 3, 370 | 10 | 65 | 85 | 30 | May 28 | 3,800 | 40 | 30 | 50 | 60 |
| Mar. 13 | 3, 385 | 25 | 10 | 15 | 30 |  |  |  |  |  |  |
| Mar. 15 | 3, 410 | 90 | 65 | 65 | 90 | Tot |  | 855 | 700 | 1,045 | 1,200 |
| Mar. 16 | 3, 410 | 90 | 90 | 35 | 35 |  |  |  |  |  |  |
| Mar. 17 | 3, 440 | 40 | 10 | 15 | 45 | Averag | 3,715 |  |  |  |  |
| Mar. 18 | 3, 440 | 70 | 70 | 15 | 15 |  |  |  |  |  |  |
| Mar. 19 | 3, 465 | 55 | 30 | 35 | 60 | June 1 | 3, 800 | 10 | 10 | 10 | 10 |
| Mar. 20 | 3, 480 | 15 |  |  | 15 | June 2 | 3. 810 | 70 | 60 | 45 | 55 |
| Mar. 22 | 3, 485 | 30 | 25 | 10 | 15 | June 3 | 3,810 | 25 | 25 | 35 | 35 |
| Mar. 23 | 3, 420 |  | 65 | 120 | 55 | June 4 | 3,810 | 15 | 15 | 25 | 25 |
| Mar. 24 | 3, 405 | 95 | 110 | 145 | 130 | June 5 | 3, 815 | 10 | 5 |  | 5 |
| Mar. 25 | 3, 420 | 25 | 10 | 30 | 45 | June 7 | 3,830 | 35 | 20 | 25 | 40 |
| Mar. 27 | 3, 485 | 75 | 10 | 15 | 80 | June 8 | 3,855 | 70 | 45 | 40 | 65 |
| Mar. ${ }^{3} 3$ | 3, 540 | 60 | 5 |  | 55 | June 9 | 3,910 | 65 | 10 | 30 | 85 |
| Mar. 30 | 3, 530 | 25 | 35 | 70 | 60 | June 10 | 3,950 | 80 | 40 | 50 | 90 |
| Mar. 31 | 3,520 | 15 | 25 | 15 | 5 | June 11 | 3, 970 | 20 |  | 10 | 30 |
| Total |  |  |  |  |  | June 12 | 3,965 | 10 | 15 | 15 | 10 |
|  |  | 1,010 | 855 | 795 | 950 | June 14 | 3,955 |  | 10 | 35 | 25 |
| Average |  |  |  |  |  | June 15 | 3,955 | 20 | 20 | 30 | 30 |
|  | 3, 434 |  |  |  | --- | June 16 | 3,960 | 50 | 45 | 20 | 25 |
|  |  |  |  |  |  | June 17 | 3,960 | 10 | 10 |  |  |
| Apr. 1 | 3, 585 | 130 | 65 | 50 | 115 | June 18 | 3,955 |  | 5 | 10 | 5 |
| Apr. 2 | 3, 610 | 95 | 70 | 100 | 125 | June 19 | 3,980 | 25 |  | 5 | 30 |
| Apr. 3 | 3, 620 | 55 | 45 | 5 | 15 | June 21 | 3,980 | 5 | 5 | 5 | 5 |
| Apr. 5 | 3, 595 |  | 25 | 40 | 15 | June 22 | 3,945 | 55 | 90 | 85 | 50 |
| Apr. 6 | 3, 575 | 40 | 60 | 20 |  | June 23 | 3, 815 | 5 | 135 | 135 | 5 |
| Apr. 7 | 3, 515 | 10 | 70 | 110 | 50 | June 24 | 3,780 | 20 | 55 | 115 | 80 |
| Apr. 8 | 3, 480 | 50 | 85 | 55 | 20 | June 25 | 3,345 | 25 | 460 | 475 | 40 |
| Apr. 9 | 3, 410 | 65 | 135 | 70 | - | June 26 | 3,345 | 5 | 5 | 5 | 5 |
| Apr. 10 | 3, 380 | 10 | 40 | 30 |  | June 28. | 3,345 | 5 | 5 | 5 | 5 |
| Apr. 12 | 3, 350 |  | 30 | 35 | 5 | June 29. | 3, 345 | 5 | 5 | 5 | 5 |
| Apr. 13 | 3, 330 | 5 | 25 | 20 |  | June 30 | 3,320 |  | 25 | 50 | 25 |
| Apr. 14 | 3,330 | 10 | 10 |  |  |  |  |  |  |  |  |
| Apr. 15 | 3, 285 | 15 | 60 | 60 | 15 | Total |  | 640 | 1, 120 | 1,265 | 785 |
| Apr. 16 | 3, 250 | 20 | 55 | 50 | 15 |  |  |  |  |  |  |
| Apr. 17 | 3, 220 | 15 | 45 | 75 | 45 |  |  |  |  |  |  |
| Apr. 19 | 3, 210 | 5 | 15 | 20 | 10 | Average | 3, 189 |  |  |  |  |
| Apr. 20-- | 3, 200 | 30 | 40 | 30 | 20 |  |  |  |  |  |  |

Table 32.-Wool top futures: Volume of trading and open contracts, Sept. 1, 1936, to June 30, 1938-Continued
[In thousands of pounds]

| Date | Open contracts | Long accounts |  | Short accounts |  | Date | Open contracts | Long accounts |  | Short accounts |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Purchases | Sales | Purchases | Sales |  |  | Purchases | Sales | $\begin{aligned} & \text { Pur- } \\ & \text { chases } \end{aligned}$ | Sales |
| 1937 |  |  |  |  |  | 1987 |  |  |  |  |  |
| July 1 | 3, 320 | 10 | 10 |  |  | Sept. 18 | 3, 655 | 70 | 65 | 30 | 35 |
| July 2 | 3, 285 | 15 | 50 | 40 | 5 | Sept. 20 | 3, 670 | 40 | 25 | 40 | 55 |
| July 6 | 3, 180 | 15 | 120 | 230 | 125 | Sept. 21 | 3, 675 | 70 | 65 | 75 | 80 |
| July 7 | 3, 140 | 30 | 70 | 110 | 70 | Sept. 22 | 3, 695 | 50 | 30 | 35 | 55 |
| July 8 | 3, 120 | 30 | 50 | 90 | 70 | Sept. 23 | 3, 565 | 230 | 360 | 210 | 80 |
| July 9 | 3. 120 | 25 | 25 | 50 | 50 | Sept. 24 | 3,735 | 195 | 25 | 45 | 215 |
| July 10 | 3, 120 | 25 | 25 | 5 | 5 | Sept. 25 | 3,735 | 35 | 35 | 15 | 15 |
| July 12 | 3,110 |  | 10 | 15 | 5 | Sept. 27 | 3,755 | 55 | 35 | 30 | 50 |
| July 13 | 3, 110 | 25 | 25 |  |  | Sept. 28 | 3,755 | 25 | 25 | 30 | 30 |
| July 14 | 3, 085 | 5 | 30 | 30 | 5 | Sept. 29 | 3, 800 | 45 |  | 30 | 75 |
| July 15 | 3, 095 | 15 | 5 |  | 10 | Sept. 30 | 3,820 | 35 | 15 | 25 | 45 |
| July 16 | 3, 235 | 145 | 5 | 15 | 155 |  |  |  |  |  |  |
| July 17 | 3, 235 | 10 | 10 |  |  | Total |  | 1,820 | 1,290 | 1,475 | 2,005 |
| July 19 | 3,210 3,155 | 5 5 | 30 60 | 60 | 5 | Average. | 3,578 | ------ | ------- | ------ | ------ |
| July 21 | 3, 155 | 10 | 10 |  |  | Oct. 1 | 3,790 |  | 30 | 40 | 10 |
| July 22 | 3, 155 | 10 | 10 |  |  | Oct. 2 | 3, 835 | 45 |  | 50 | 95 |
| July 23 | 3, 170 | 15 |  | 15 | 30 | Oct. 4 | 3, 850 | 65 | 50 | 35 | 50 |
| July 24 | 3,185 | 20 | 5 | 15 | 30 | Oct. 5 | 3, 880 | 80 | 50 | 25 | 55 |
| July 26 | 3, 215 | 55 | 25 | 25 | 55 | Oct. 6 | 3,735 | 160 | 305 | 340 | 195 |
| July 27 | 3, 175 |  | 40 | 90 | 50 | Oct. 7 | 3, 280 | 15 | 470 | 475 | 20 |
| July 28 | 3, 055 |  | 120 | 160 | 40 | Oct. 8 | 3, 385 | 145 | 40 | 75 | 180 |
| July 29 | 3, 050 | 70 | 35 | 40 | 75 | Oct. 9 | 3, 375 | 35 | 45 | 25 | 15 |
| July 30 | 2,980 |  | 110 | 110 |  | Oct. 11 | 3, 425 | 100 | 50 | 45 | 95 |
| July 31 | 2,975 | 5 | 10 | 15 | 10 | Oct. 13 | 3, 500 | 170 | 95 | 100 | 175 |
|  |  |  |  |  |  | Oct. 14 | 3, 500 | 55 | 55 | 80 | 80 |
| Total | ------ | 545 | 890 | 1,140 | 795 | Oct. 15 | 3,765 | 270 | 5 | 130 | 395 |
| Average | 3,147 |  |  |  |  | Oct. 16 | 3,850 | 125 | 40 | 100 | 185 |
| Average | 3, 147 | $\ldots$ | $\cdots$ | ------ | $\cdots$ | Oct. 18 | 3,975 | 135 | 10 | 35 | 160 |
| Aug. 2 | 2, 985 | 20 | 10 |  | 10 | Oct. 19 | 4, 000 | 200 | 175 | 200 | 225 |
| Aug. 3 | 2, 980 |  | 5 | 40 | 35 | Oct. 20 | 4, 140 | 170 | 30 | 100 | 240 |
| Aug. 4 | 3, 000 | 25 | 5 | 35 | 55 | Oct. 21 | 4, 205 | 240 | 175 | 250 | 315 |
| Aug. 5 | 3, 020 | 25 | 5 | 30 | 50 | Oct. 22 | 4,210 | 130 | 125 | 90 | 95 |
| Aug. 6 | 3, 030 | 10 |  | 10 | 20 | Oct. 23 | 4,290 | 95 | 15 | 10 | 90 |
| Aug. 7 | 3, 055 | 25 |  | 50 | 75 | Oct. 25 | 4,340 | 50 |  | 35 | 85 |
| Aug. 9 | 3, 015 | 20 | 60 | 50 | 10 | Oct. 26 | 4,265 | 20 | 95 | 210 | 135 |
| Aug. 10 | 3, 040 | 30 | 5 |  | 25 | Oct. 27 | 4,320 | 85 | 30 | 95 | 150 |
| Aug. 11 | 3, 050 | 15 | 5 |  | 10 | Oct. 28 | 4,340 | 60 | 40 | 30 | 50 |
| Aug. 12 | 3, 055 | 10 | 5 |  | 5 | Oct. 29 | 4,325 | 45 | 60 | 55 | 40 |
| Aug. 13 | 3, 080 | 35 | 10 | 15 | 40 | Oct. 30 | 4,385 | 70 | 10 | 25 | 85 |
| Aug. 14 | 3, 085 | 10 | 5 | 20 | 25 |  |  |  |  |  |  |
| Aug. 16 | 3, 080 | 15 | 20 | 55 | 50 | Total |  | 2, 565 | 2,000 | 2,655 | 3,220 |
| Aug. 17 | 3, 080 |  |  | 45 | 45 |  | 3, 919 |  |  |  |  |
| Aug. 18 | 3, 080 | 5 | 5 | 10 | 10 | Average. | 3,919 | ------ | $\xrightarrow{-\cdots----10}$ | ------- | ----- |
| Aug. 19 | 3, 125 | 55 | 10 | 80 | 125 | Nov. 1 | 4, 410 | 30 | 5 | 10 | 35 |
| Aug. 20 | 3, 100 | 10 | 35 | 45 | 20 | Nov. 3 | 4, 365 | 65 | 110 | 140 | 95 |
| Aug. 21 | 3, 125 | 30 | 5 | 10 | 35 | Nov. 4 | 4, 375 | 100 | 90 | 200 | 210 |
| Aug. 23 | 3, 130 | 20 | 15 | 30 | 35 | Nov. 5 | 4,565 | 315 | 125 | 185 | 375 |
| Aug. 24 | 3, 175 | 50 | 5 | 35 | 80 | Nov. 6 | 4,810 | 310 | 65 | 230 | 475 |
| Aug. 25 | 3, 165 | 5 | 15 | 60 | 50 | Nov. 8 | 5, 065 | 480 | 225 | 210 | 465 |
| Aug. 26 | 3, 190 | 35 | 10 | 5 | 30 | Nov. 9 | 5, 045 | 265 | 285 | 305 | 285 |
| Aug. 27 | 3, 185 | 15 | 20 | 20 | 15 | Nov. 10 | 5, 010 | 190 | 225 | 280 | 245 |
| Aug. 28 | 3, 190 | 5 |  | 10 | 15 | Nov. 12 | 5, 040 | 160 | 130 | 145 | 175 |
| Aug. 30 | 3, 245 | 55 |  | 25 | 80 | Nov. 13 | 5, 050 | 20 | 10 | 60 | 70 |
| Aug. 31 | 3, 290 | 55 | 10 | 80 | 125 | Nov. 15 | 5,155 | 125 | 20 | 45 | 150 |
|  |  |  |  |  |  | Nov. 16 | 5,145 | 40 | 50 | 185 | 175 |
| Total | ---- | 580 | 265 | 760 | 1,075 | Nov. 17 | 5,215 | 95 | 25 | 145 | 215 |
| Average | 3, 098 |  | - | ---- |  | Nov. 18 | 5,255 | 65 | 25 | 110 | 150 |
|  |  |  |  |  |  | Nov. 19 | 5, 355 | 385 | 285 | 535 | 635 |
| Sept. 1 | 3,355 3,315 | 85 <br> 45 | 80 | 90 110 | 155 70 | Nov. 20 | 5,400 5,635 | 100 | 55 240 | 230 | 275 515 |
| Sept. 3 | 3,325 | 15 | 5 | 65 | 75 | Nov. 23 | 5, 755 | 180 | 60 | 105 | 225 |
| Sept. 7 | 3, 385 | 85 | 25 | 35 | 95 | Nov. 24 | 5, 785 | 340 | 310 | 490 | 520 |
| Sept. 8 | 3, 450 | 80 | 15 | 100 | 165 | Nov. 26 | 5, 755 | 115 | 145 | 350 | 320 |
| Sept. 9 | 3, 480 | 35 | 5 | 55 | 85 | Nov. 27 | 5, 750 | 80 | 85 | 180 | 175 |
| Sept. 10 | 3, 495 | 20 | 5 | 45 | 60 | Nov. 29 | 5, 795 | 285 | 240 | 190 | 235 |
| Sept. 11 | 3, 405 | 35 | 125 | 105 | 15 | Nov. 30 | 5,790 | 55 | 60 | 195 | 190 |
| Sept. 13- | 3, 475 | 100 | 30 | 135 | 205 |  |  |  |  |  |  |
| Sept. 14 | 3, 485 | 20 | 10 | 5 | 15 | Total |  | 4,275 | ${ }^{2} 2,870$ | ${ }^{3} 4,805$ | ${ }^{4} 6,210$ |
| Sept. 15 | 3, 580 | 140 | 45 | 10 | 105 |  |  |  |  |  |  |
| Sept. 16 | 3, 600 | 40 | 20 | 45 | 65 | Average.- | 5,197 |  |  |  |  |
| Sept. 17-- | 3, 650 | 270 | 220 | 110 | 160 |  |  |  |  |  |  |

[^23]Table 32.-Wool top futures: Volume of trading and open contracts, Sept. 1, 1936, to June 30, 1938-Continued
[In thousands of pounds]


[^24]Table 32.-Wool top futures: Volume of trading and open contracts, Sept. 1, 1936, to June 30, 1938-Continued
[In thousands of pounds]

| Date | Open contracts | $\begin{aligned} & \text { Long } \\ & \text { accounts } \end{aligned}$ |  | Short accounts |  | Date | Open contracts | $\begin{aligned} & \text { Long } \\ & \text { accounts } \end{aligned}$ |  | Short accounts |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Purchases | Sales | Purchases | Sales |  |  | Purchases | Sales | Purchases | Sales |
| 1938 |  |  |  |  |  | 1938 |  |  |  |  |  |
| May 2 | 7,155 | 65 | 50 | 50 | 65 | June 1. | 8, 145 | 120 | 45 | 5 | 80 |
| May 3 | 7,210 | 155 | 100 | 130 | 185 | June 2 | 8,315 | 235 | 65 | 165 | 335 |
| May 4 | 7, 265 | 145 | 90 | 105 | 160 | June 3 | 8, 485 | 220 | 50 | 305 | 475 |
| May 5 | 7, 390 | 150 | 25 | 55 | 180 | June 4 | 8, 480 | 65 | 70 | 110 | 105 |
| May 6 | 7,510 | 250 | 130 | 145 | 265 | June 6 | 8,525 | 120 | 75 | 90 | 135 |
| May 7 | 7, 510 | 25 | 25 | 40 | 40 | June 7 | 8, 460 | 85 | 150 | 175 | 110 |
| May 9 | 7,540 | 55 | 25 | 60 | 90 | June 8 | 8, 440 | 15 | 35 | 70 | 50 |
| May 10 | 7,215 | 30 | 355 | 410 | 85 | June 9 | 8,495 | 150 | 95 | 240 | 295 |
| May 11 | 7,245 | 70 | 40 | 35 | 65 | June 10 | 8, 615 | 240 | 120 | 135 | 255 |
| May 12 | 7,305 | 160 | 100 | 55 | 115 | June 11. | 8, 620 | 25 | 20 | 25 | 30 |
| May 13 | 7,405 | 145 | 45 | 60 | 160 | June 13 | 8, 650 | 75 | 45 | 50 | 80 |
| May 14 | 7,425 | 65 | 45 | 50 | 70 | June 14 | 8, 670 | 60 | 40 | 50 | 70 |
| May 16 | 7,510 | 95 | 10 | 35 | 120 | June 15 | 8, 680 | 40 | 30 | 60 | 70 |
| May 17 | 7,555 | 155 | 110 | 190 | 235 | June 16 | 8, 735 | 90 | 35 | 125 | 180 |
| May 18- | 7,435 | 70 | 190 | 200 | 80 | June 17 | 8, 745 | 35 | 25 | 65 | 75 |
| May 19 | 7,445 | 170 | 160 | 105 | 115 | June 18 | 8, 720 | 10 | 35 | 40 | 15 |
| May 20 | 7, 480 | 120 | 85 | 60 | 95 | June 20 | 8, 750 | 100 | 70 | 115 | 145 |
| May 21 | 7, 550 | 95 | 25 | 80 | 150 | June 21 | 8,790 | 260 | 220 | 375 | 415 |
| May 23 | 7,790 | 250 | 10 | 45 | 285 | June 22 | 8, 620 | 235 | 405 | 980 | 810 |
| May 24 | 7,915 | 250 | 125 | 210 | 335 | June 23 | 8, 675 | 185 | 130 | 130 | 185 |
| May 25 | 7,895 | ${ }^{25}$ | 45 | 80 | 60 | June 24 | 8,435 | 245 | 485 | 580 | 340 |
| May 26 | 7,860 | 90 | 125 | 105 | 70 | June 25 | 8,485 | 135 | 85 | 135 | 185 |
| May 27 | 7,915 | 85 | 30 | 130 | 185 | June 27 | 8, 660 | 360 | 185 | 120 | 295 |
| May 28 | 7, 985 | 85 | 15 | 10 | 80 | June 28 | 8, 435 | 330 | 555 | 1,055 | 830 |
| May 31 | 8,070 | 135 | 50 | 145 | 230 | June 29 | 8,560 8,600 | ${ }_{265}^{225}$ | ${ }_{225}$ | ${ }_{145}^{215}$ | 340 185 |
| Total |  | 2,940 | 2,010 | 2, 590 | 3, 520 |  |  |  |  |  |  |
|  |  |  |  |  |  | Total |  | 3,925 | 3,395 | 5,560 | 6,090 |
| Averag | 7, 543 |  |  |  |  | A verage | 8,569 | - |  |  |  |

Table 33.-Wool top futures: Volume of trading and open contracts (one side only) on the New York Wool Top Exchange, July $1938{ }^{1}$
[In thousands of pounds]

| Date | July future |  | October future |  | December future |  | March future |  | May future |  | Total all futures ${ }^{2}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Volume | $\begin{aligned} & \text { Open } \\ & \text { con- } \\ & \text { tracts }{ }^{3} \end{aligned}$ | Volume | Open contracts | Volume | Open contracts | Volume | Open contracts | Volume | $\begin{aligned} & \text { Open } \\ & \text { con- } \\ & \text { tracts } \end{aligned}$ | Volume | Open contracts |
| July 1 |  | 560 |  | 2, 320 | 95 | 2, 635 | 85 | 2,215 | 35 | 185 | 215 | 7,945 |
| July 5 | 15 | 545 | 35 | 2, 330 | 130 | 2, 700 | 145 | 2, 215 | 35 | 200 | 360 | 8,020 |
| July 6 | 15 | 270 | 45 | 2, 340 | 95 | 2, 755 | 115 | 2, 240 | 50 | 205 | 320 | 7, 840 |
| July 7 | 15 | 260 | 90 | 2, 360 | 125 | 2, 840 | 155 | 2, 240 | 100 | 270 | 485 | 8,000 |
| July 8 |  | 260 | 150 | 2, 330 | 60 | 2, 855 | 230 | 2, 190 | 80 | 255 | 520 | 7,920 |
| July 11 | 5 | 260 | 130 | 2, 300 | 275 | 2,960 | 100 | 2, 205 | 10 | 260 | 520 | 8, 015 |
| July 12 |  | 245 | 50 | 2, 255 | 75 | 3, 000 | 140 | 2, 260 | 30 | 265 | 295 | 8, 055 |
| July 13 |  | 145 | 105 | 2,175 | 160 | 2,965 | 120 | 2, 345 | 25 | 290 | 410 | 7,950 |
| July 14. | 15 | 85 | 95 | 2, 105 | 145 | 2,950 | 280 | 2,475 | 30 | 315 | 580 | 7,960 |
| July 15 | 10 | 80 | 35 | 2, 070 | 80 | 2,955 | 190 | 2, 445 |  | 315 | 315 | 7,895 |
| July 18 |  | 80 |  | 2,070 | 70 | 2,935 | 145 | 2, 465 | 40 | 335 | 255 | 7,915 |
| July 19 | 20 | 70 | 335 | 2, 250 | 270 | 2,925 | 340 | 2, 415 | 45 | 345 | 1,010 | 8, 035 |
| July 20 | 5 | 70 | 55 | 2, 215 | 55 | 2,910 | 130 | 2, 425 | 90 | 385 | 335 | 8, 035 |
| July 21 |  | 70 | 95 | 2, 175 | 130 | 2,940 | 185 | 2, 510 | 165 | 515 | 575 | 8, 240 |
| July 22 | 10 | 45 | 65 | 2,135 | 100 | 2,990 | 165 | 2,590 | 95 | 560 | 435 | 8, 350 |
| July 25 |  | 45 | 170 | 2,015 | 165 | 3, 005 | 150 | 2, 600 | 160 | 660 | 645 | 8,355 |
| July 26 |  | 30 | 80 | 1,975 | 130 | 2,980 | 15 | 2, 610 | 90 | 735 | 315 | 8,360 |
| July 27 |  | 5 | 145 | 1, 870 | 215 | 2, 925 | 270 | 2,615 | 70 | 755 | 700 | 8,200 |
| July 28 |  | 5 | 95 | 1, 900 | 100 | 2, 910 | 160 | 2, 705 | 95 | 770 | 450 | 8, 320 |
| July 29 |  |  | 35 | 1, 865 | 25 | 2,910 | 105 | 2,755 | 125 | 895 | 290 | 8,455 |

[^25]Table 34.-Wool top futures: Monthly volume of trading by futures, May 1931 to December $1939{ }^{1}$
[In thousands of pounds]


[^26]Table 34.-Wool top futures: Monthly volume of trading by futures, May 1931, to December 1939-Continued
[In thousands of pounds]


[^27]Table 35.-Wool top futures: Average closing price of the dominant (March or October) future, September 1936 to December $1939{ }^{1}$
[In cents per pound]

| Week ended | A verage price |  | Week ended | Arerage price |  | Week ended | A verage price |  | Week ended | Average price |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | March | October |  | March | October |  | March | October |  | March | October |
|  |  |  | 1937 |  |  | 1938 |  |  | 1989 |  |  |
|  |  |  | Jan. 9--- | 118. 2 |  | Jan. 8--- | 83.0 |  | Jan. 7--- | 81.8 |  |
|  |  |  | Jan. 16-- | 118.7 |  | Jan. 15-- | 81.3 |  | Jan. 14-- | 81.1 |  |
|  |  |  | Jan. 23-- | 114.6 | 112.6 | Jan. 22-- | 81.9 79.4 | 76.2 | Jan. 21.- | 81.2 81.0 | 81.1 |
|  |  |  | Feb. 6-- | 108.4 | 111.7 | Feb. $5 .-$ | 78.3 | 75.4 | Feb. 4.- | 81.8 | 81.6 |
|  |  |  | Feb. 13- |  | 108.8 | Feb. 11- |  | 73.5 | Feb. 11 |  | 82.0 |
|  |  |  | Feb. 20 |  | 107.4 | Feb. 19 |  | 74.2 | Feb. 18 |  | 80.9 |
|  |  |  | Feb. 27 |  | 109.1 | Feb. 26 |  | 77.5 | Feb. 25 |  | 81.0 |
|  |  |  | Mar. 6-- |  | 109.7 | Mar. 5 |  | 77.8 | Mar. 4 |  | 80.3 |
|  |  |  | Mar. 13 |  | 112.1 | Mar. 12 |  | 76.7 | Mar. 11 |  | 80.0 |
|  |  |  | Mar. 20 |  | 115.8 | Mar. 19 |  | 77.0 | Mar. 18 |  | 79.8 |
|  |  |  | Mar. ${ }^{2}$ |  | 116.8 | Mar. 26- |  | 77.6 | Mar. 25_ |  | 79.3 |
|  |  |  | Apr. 3 |  | 117.4 | Apr. 2-- |  | 77.8 | Apr. 1-- |  | 78.8 |
|  |  |  | Apr. 10 |  | 116. 2 | Apr. 9-- |  | 77.0 | Apr. 6.- |  | 78.4 |
|  |  |  | A pr. 17 |  | 115.1 | Apr. 14. |  | 78.1 | Apr. 15 |  | 78.0 |
|  |  |  | Apr. 24 |  | 114.5 | Apr. 23. |  | 79.4 | Apr. 22 |  | 78.4 |
|  |  |  | May 1.- |  | 111.9 | Apr. 30 |  | 78.6 | Apr. 29_ |  | 79.2 |
|  |  |  | May 8 |  | 111.1 | May 7-- |  | 77.0 | May 6. |  | 79.6 |
|  |  |  | May 15 |  | 108. 7 | May 14 |  | 76.5 | May 13 |  | 80.1 |
|  |  |  | May 22 |  | 107.8 | May 21 |  | 75.4 | May 20 |  | 80.1 |
|  |  |  | May 28 |  | 107.8 | May 28 |  | 74.4 | May 27. |  | 80.2 |
|  |  |  | June 5.- |  | 109.8 | June 4.- |  | 73.3 | June 3.- |  | 80.7 |
|  |  |  | June 12 |  | 108.9 | June 11- |  | 73.9 | June 10 |  | 80.0 |
|  |  |  | June 19. |  | 108.8 | June 18. |  | 73.5 | June 17 |  | 79.3 |
|  |  |  | June 26. |  | 108.6 | June 25. |  | 76.2 | June 24 |  | 79.2 |
|  |  |  | July 2--- |  | 109.9 | July 1--- |  | 77.6 | June 30. |  | 79.3 |
|  |  |  | July 10-- |  | 110.5 | July 8... |  | 78.6 | July 7 --- |  | 81.1 |
|  |  |  | July 17-- |  | 110.3 | July 15.- |  | 79.6 | July 14 |  | 82.5 |
|  |  |  | July 24 |  | 111.1 | July 22. |  | 81.2 | July 21. |  | 83.4 |
|  |  |  | July 31-- | 112.2 | 112.6 | July 29.- | 83.0 | 81.6 | July 28 | 81.2 | 83.2 |
|  |  |  | Aug. 7-- | 111.3 | 112.0 | Aug. 5-- | 80.8 | 78.9 | Aug. 4-- | 81.5 | 83.5 |
|  |  |  | Aug. 14 | 110.5 |  | Aug. 12- | 81.1 |  | Aug. 11- | 80.5 |  |
| 1936 |  |  | Aug. 21- | 110.1 |  | Aug. 19- | 80.9 |  | Aug. 18- | 80.4 |  |
|  |  |  | Aug. 28- | 109.4 |  | Aug. 26. | 80.8 |  | Aug. 25. | 79.8 |  |
| Sept. 5-- | 96. 4 |  | Sept. 3- | 107.4 |  | Sept. 3-- | 80.8 |  | Sept. 2- | 81.7 |  |
| Sept. 12 | 96.7 |  | Sept. 11. | 104.3 |  | Sept. 10. | 80.6 |  | Sept. 9-- | 96.9 |  |
| Sept. 19. | 95.6 |  | Sept. 18. | 103.8 |  | Sept. 17 | 80.7 |  | Sept. 16 | 108.8 |  |
| Sept. 26 | 94.8 | ----- | Sept. 25- | 103.1 |  | Sept. 24 | 81.3 |  | Sept. 23 | 114.5 |  |
| Oct. 3.-- | 95.0 |  | Oct. 2-.- | 1022 |  | Oct. 1--- | 82.0 |  | Sept. 30. | 115.6 |  |
| Oct. 10-- | 95.4 | ------ | Oct. 9--- | 96.9 | ------ | Oct. 8--- | 83.7 |  | Oct. 7--- | 110.6 |  |
| Oct. 17.- | 97.7 | ---- | Oct. 16-- | 94.2 |  | Oct. 15-- | 83.6 | ------ | Oct. 14-- | 108.4 | ---- |
| Oct. 24-- | 98.5 |  | Oct. 23-- | 92.5 |  | Oct. 22-- | 84.0 |  | Oct. 21. | 106. 7 |  |
| Oct. 31-- | 99.5 |  | Oct. 30-- | 91.6 |  | Oct. 29-- | 84.3 |  | Oct. 28.- | 105.8 |  |
| Nov. 7. | 102.9 |  | Nov.6-- | 86.5 |  | Nov. 5 - | 84.5 |  | Nov. 4. | 101.9 |  |
| Nov. $14^{2}$ | 104.9 |  | Nov.13. | 82.9 |  | Nov. 12 | 83.5 |  | Nov. 10- | 99.8 |  |
| Nov. 21. | 108. 1 |  | Nov. 20- | 80.2 |  | Nov. 19. | 83.0 |  | Nov. 18 - | 101.8 |  |
| Nov. 28. | 109.5 |  | Nov. 27. | 77.2 |  | Nov. 26. | 80.5 |  | Nov. 25. | 102.9 |  |
| Dec. 5-- | 109. 2 |  | Dec. 4-- | 80.8 |  | Dec. $3^{-}$ | 79.4 |  | Dec. 2-- | 102.6 |  |
| Dec. 12 | 109.2 |  | Dec. 11- | 84.0 |  | Dec. $10-$ | 78.8 |  | Dec. 9 -- | 103.4 |  |
| Dec. 19- | 111.7 |  | Dec. 18- | 84.7 |  | Dec. 17. | 79.5 |  | Dec. 16. | 103.6 |  |
| Dec. 24 | 112.8 |  | Dec. 24- | 83.5 |  | Dec. 23. | 79.9 |  | Dec. 23. | 103. 7 |  |
| Dec: 31. | 112.9 |  | Dec. 31. | 84.6 |  | Dec. 30 | 81.8 |  | Dec. $30-$ | 103.6 | - |

[^28]Table 36.-Wool top futures: Commitments by type of trader, Friday of each week, from Sept. 4, 1936, to June 24, 1938
[In thousands of pounds]

| Date | Wool growers |  | Dealers |  | Top makers |  | Mills |  | Clothing manufacturers |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Long | Short | Long | Short | Long | Short | Long | Short | Long | Short |
| 1936 |  |  |  |  |  |  |  |  |  |  |
| Sept. 4 | 50 | 20 | 375 | 340 | 485 | 1,060 | 370 | 10 | 5 |  |
| Sept. 11 | 50 | 20 | 350 | 305 | 510 | 1,085 | 345 | 10 | 5 |  |
| Sept. 18 | 50 | 20 | 360 | 215 | 430 | 1,080 | 295 |  | 10 |  |
| Sept. 25 | 30 | 20 | 340 | 200 | 415 | -975 | 270 |  | 10 |  |
| Oct. 2 | 30 | 20 | 330 | 195 | 415 | 950 | 270 |  | 10 |  |
| Oct. 9 | 45 | 20 | 300 | 190 | 390 | 910 | 270 |  | 10 |  |
| Oct. 16 | 45 | 20 | 285 | 240 | 365 | 840 | 270 |  | 10 |  |
| Oct. 23 | 45 | 20 | 275 | 210 | 370 | 825 | 225 |  | 10 |  |
| Oct. 30 | 55 | 20. | 220 | 225 | 420 | 805 | 185 |  | 10 | ------- |
| Nov. 6 | 55 | 20 | 205 | 300 | 465 | 905 | 360 |  |  |  |
| Nov. 13 | 60 | 20 | 240 | 315 | 475 | 955 | 345 |  | 35 |  |
| Nov. 20 | 65 | 20 | 235 | 280 | 535 | 1,200 | 465 |  | 45 | -------- |
| Nov. 27 | 65 | 20 | 270 | 305 | 490 | 1,345 | 655 |  | 55 | -------- |
| Dec. 4 | 60 | 5 | 275 | 315 | 485 | 1,430 | 710 |  | 55 | -------- |
| Dec. 11 | 60 | 5 | 295 | 315 | 515 | 1,515 | 740 |  | 55 | ------- |
| Dec. 18 | 65 | 5 | 275 | 350 | 605 | 1,640 | 800 |  | 55 | --.----- |
| Dec. 241 | 65 | 5 | 275 | 345 | 685 | 1,780 | 800 |  | 55 | -------- |
| Dec. $31{ }^{1}$ | 65 | 5 | 300 | 345 | 685 | 1,850 | 840 |  | 55 | -------- |
| $\text { Jan. } 8.1937$ | 65 | 5 | 390 | 355 | 690 | 1,955 | 825 |  | 55 |  |
| Jan. 15 | 70 | 5 | 460 | 325 | 715 | 2,370 | 1,035 |  | 50 |  |
| Jan. 22 | 70 | 25 | 480 | 345 | 645 | 2, 390 | 1,140 |  | 65 | -------- |
| Jan. 29 | 55 | 25 | 550 | 325 | 630 | 2,425 | 1,085 | 10 | 65 | -------- |
| Feb. 5 | 55 | 25 | 570 | 360 | 625 | 2,465 | 1,130 | 10 | 65 | -------- |
| Feb. 111 | 50 | 25 | 675 | 400 | 620 | 2, 535 | 1,210 | 30 | 55 | -------- |
| Feb. 19 | 45 | 25 | 685 | 515 | 600 | 2, 630 | 1,425 | 30 | 65 | -------- |
| Feb. 26 | 45 | 25 | 675 | 525 | 570 | 2,670 | 1, 425 | 30 | 65 | -------- |
| Mar. 5 | 45 | 25 | 695 | 525 | 560 | 2, 730 | 1,465 | 30 | 65 | -------- |
| Mar. 12 | 45 | 25 | 585 | 545 | 570 | 2, 655 | 1,460 | 30 | 90 | -------- |
| Mar. 19 | 45 | 25 | 575 | 665 | 730 | 2, 660 | 1,380 | 10 | 60 |  |
| Mar. $25{ }^{1}$ | 45 | 25 | 560 | 745 | 775 | 2,535 | 1,345 | 10 | 45 |  |
| Apr. 2 | 35 | 25 | 485 | 940 | 1,040 | 2,555 | 1,345 | 10 | 45 |  |
| Apr. 9 | 35 | 25 | 470 | 1,000 | 1,135 | 2,295 | 1,120 | 10 | 10 |  |
| Apr. ${ }^{16}$ | 35 | 25 | 430 | 965 | 1,105 | 2,190 | 1, 095 | 10 | 10 |  |
| Apr. 23 | 35 | 25 | 445 | 885 | 1,120 | 2,245 | 1, 100 | 10 | 10 |  |
| Apr. 30 | 35 | 25 | 640 | 775 | 1,615 | 2,245 | - 890 | 190 | 10 |  |
| May 7 | 35 | 25 | 675 | 770 | 1,625 | 2, 125 | 890 | 190 | 10 |  |
| May 14 | 35 | 25 | 715 | 735 | 1,720 | 2,095 | 890 | 305 | 10 | 40 |
| May 21 | 30 | 20 | 800 | 725 | 1,730 | 2,120 | 895 | 315 | 10 | 40 |
| May 28 | 30 | 10 | 740 | 700 | 1,850 | 2, 220 | 870 | 315 | 10 | 40 |
| June 4 | 30 | 10 | 745 | 655 | 1,815 | 2,245 | 870 | 340 | 10 | 40 |
| June 11- | 30 |  | 755 | 705 | 1,840 | 2,355 | 985 | 340 | 10 | 40 |
| June 18- | 30 | 5 | 735 | 745 | 1,850 | 2,325 | 985 | 340 355 | 10 | 40 |
| June 25 | 30 | 5 | 610 | 710 | 1,625 | 1,890 | 780 | 355 | 10 | 40 |

${ }^{1}$ Thursday.

Table 36.-Wool top futures: Commitments by type of trader, Friday of each week, from Sept. 4, 1936, to June 24, 1938-Continued
[In thousands of pounds]

| Date | Futures commission merchants |  | Industryconnected speculators |  | Speculators not related to industry |  | Foreign traders |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Long | Short | Long | Short | Long | Short | Long | Short |  |
| 1936 |  |  |  |  |  |  |  |  |  |
| Sept. 4 | 50 | 75 | 65 | 50 | 110 | 25 | 85 | 15 | 1,595 |
| Sept. 11. | 50 | 70 | 80 | 50 | 100 | 20 | 85 | 15 | 1,57: |
| Sept. 18 | 45 | 70 | 85 | 40 | 100 | 20 | 85 | 15 | 1,466 |
| Sept. 25 | 40 | 65 | 95 | 40 | 45 | 5 | 85 | 25 | 1,330 |
| Oct. 2 | 40 | 65 | 90 | 40 | 25 |  | 85 | 25 | 1,295 |
| Oct. 9 | 40 | 65 | 90 | 40 | 20 |  | 85 | 25 | 1,250 |
| Oct. 16 | 50 | 40 | 65 | 35 | 25 |  | 85 | 25 | 1,200 |
| Oct. 23 | 50 | 40 | 70 | 35 | 25 |  | 85 | 25 | 1,155 |
| Oct. 30 | 50 | 40 | 65 | 15 | 35 |  | 90 | 25 | 1,130 |
| Nov. 6 | 60 | 50 | 60 | 30 | 35 |  | 90 | 25 | 1,330 |
| Nov. 13 | 10 | 50 | 95 | 40 | 55 |  | 90 | 25 | 1,405 |
| Nov. 20 | 10 | 50 | 155 | 55 | 25 |  | 95 | 25 | 1,630 |
| Nov. 27. | 10 | 50 | 150 | 55 | 20 | 10 | 95 | 25 | 1,810 |
| Dec. 4 | 10 | 50 | 150 | 80 | 65 | 10 | 105 | 25 | 1,915 |
| Dec. 11 | 10 | 50 | 150 | 80 | 70 | 10 | 105 | 25 | 2,000 |
| Dec. 18 | 15 | 55 | 140 | 55 | 90 | 10 | 95 | 25 | 2,140 |
| Dec. $24{ }^{1}$ | 10 | 40 | 180 | 55 | 95 | 10 | 95 | 25 | 2,260 |
| Dec. $31{ }^{1}$ | 5 | 35 | 185 | 55 | 95 | 10 | 95 | 25 | 2,325 |
| 1937 |  |  |  |  |  |  |  |  |  |
| Jan. 8 | 25 | 50 | 100 | 50 | 110 | 10 | 185 | 20 | 2, 445 |
| Jan. 15 | 15 | 60 | 100 | 10 | 80 | 30 | 295 | 20 | 2, 820 |
| Jan. 22 | 15 | 50 | 95 | 45 | 100 | 30 | 295 | 20 | 2,905 |
| Jan. 29 | 15 | 40 | 75 | 60 | 155 | 30 | 305 | 20 | 2,935 |
| Feb. 5 | 15 | 30 | 80 | 55 | 160 | 30 | 295 | 20 | 2,995 |
| Feb. $11^{1}$ | 15 | 40 | 65 | 45 | 135 | 20 | 290 | 20 | 3,115 |
| Feb. 19 | 15 | 35 | 95 | 75 | 145 | 35 | 290 | 20 | 3,365 |
| Feb. 26 |  |  | 150 | 75 | 145 | 20 | 290 | 20 | 3,365 |
| Mar. 5 |  |  | 160 | 75 | 145 | 20 | 290 | 20 | 3,425 |
| Mar. 12 |  |  | 175 | 70 | 135 | 25 | 310 | 20 | 3,370 |
| Mar. 19 |  |  | 200 | 60 | 150 | 25 | 325 | 20 | 3,465 |
| Mar. $25^{1}$ |  |  | 235 | 55 | 90 | 30 | 325 | 20 | 3,420 |
| Apr. 2 |  |  | 250 | 30 | 85 | 30 | 325 | 20 | 3, 610 |
| Apr. 9 | 25 | ------ | 230 | 30 | 75 | 30 | 310 | 20 | 3,410 |
| Apr. 16 | 25 |  | 175 | 10 | 70 | 30 | 305 | 20 | 3, 250 |
| Apr. 23 | 25 |  | 165 | 5 | 55 | 30 | 265 | 20 | 3,220 |
| Apr. 30 |  | 365 | 230 |  | 30 | 25 | 195 | 20 | 3,645 |
| May 7 | 5 | 460 | 175 |  | 15 | 30 | 190 | 20 | 3, 620 |
| May 14 | 20 | 450 | 145 | 30 | 15 | 25 | 180 | 25 | 3, 330 |
| May 21 | 5 | 470 | 110 | 30 | 20 | 25 | 170 | 25 | 3,770 |
| May 28 |  | 445 | 110 | 25 | 20 | 20 | 170 | 25 | 3,800 |
| June 4-- |  | 445 | 145 | 25 | 25 | 25 | 170 | 25 | 3, 810 |
| June 11 | 10 | 450 | 175 | 25 | 25 | 30 | 140 | 25 | 3,970 |
| June 18. | 10 | 430 | 195 | 25 | 25 | 20 | 115 | 25 | 3,955 |
| June 25. | 50 | 300 | 195 |  | 25 | 20 | 20 | 25 | 3,345 |

[^29]Table 36.-Wool top futures: Commitments by type of trader, Friday of each week, from Sept. 4, 1936, to June 24, 1938-Continued
[In thousands of pounds]

${ }^{1}$ Thursday.

Table 36.-Wool top futures: Commitments by type of trader, Friday of each week, from Sept. 4, 1936, to June 24, 1938-Continued
[In thousands of pounds]

${ }^{1}$ Thursday.

Table 37.-Wool top futures: Commitments by type of trader, Friday of each week July 1, 1938, to July 28, 1939
[In thousands of pounds]

| Date | Dealers |  | Top makers |  | Mills |  | Total special accounts |  | Total small accounts |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Long | Short | Long | Short | Long | Short | Long | Short | Long | Short |  |
| 1938 |  |  |  |  |  |  |  |  |  |  |  |
| July 1 | 1,300 | 2, 220 | 360 | 4,385 | 1,055 |  | 2, 715 | 6, 605 | 5, 230 | 1, 340 | 7, 945 |
| July 8 | 1,320 | 2, 325 | 290 | 4,485 | 995 |  | 2, 605 | 6, 810 | 5, 315 | 1, 110 | 7,920 |
| July 15 | 1,290 | 2,265 | 480 | 4,495 | 1,045 |  | 2, 815 | 6,760 | 5, 080 | 1,135 | 7, 895 |
| July 22 | 1,460 | 2, 315 | 335 | 4,925 | 1,095 |  | 2, 890 | 7,240 | 5, 460 | 1,110 | 8, 350 |
| July 29 | 1,255 | 2, 560 | 455 | 4,810 | 1,295 |  | 3, 005 | 7, 370 | 5,450 | 1,085 | 8, 455 |
| Aug. 5 | 1,105 | 2, 525 | 610 | 4,750 | 1,295 |  | 3, 010 | 7,275 | 5, 305 | 1,040 | 8,315 |
| Aug. 12 | 1,140 | 2, 420 | 705 | 4,780 | 1,295 |  | 3, 140 | 7,210 | 5,180 | 1,110 | 8, 320 |
| Aug. 19 | 1, 075 | 2, 340 | 650 | 4,740 | 1,295 |  | 3, 020 | 7,080 | 5,170 | 1,110 | 8, 190 |
| Aug. 26 | 1,065 | 2, 220 | 655 | 4,695 | 1,145 |  | 2,865 | 6, 915 | 5, 270 | 1,220 | 8,135 |
| Sept. 2 | 1,150 | 2, 245 | 705 | 4,605 | 970 |  | 2, 825 | 6, 850 | 5,290 | 1, 265 | 8,115 |
| Sept. 9 | 1,205 | 2,425 | 670 | 4,490 | 1,120 |  | 2, 995 | 6, 915 | 5,115 | 1,195 | 8, 110 |
| Sept. 16 | 1,105 | 2,285 | 460 | 3,945 | 1,045 |  | 2, 610 | 6,230 | 5, 075 | 1, 4.55 | 7,685 |
| Sept. 23 | 885 | 2, 280 | 350 | 3,755 | 1,045 |  | 2, 280 | 6, 035 | 5,175 | 1,420 | 7,455 |
| Sept. 30 | 855 | 2, 160 | 415 | 3,900 | 1,095 |  | 2, 365 | 6, 060 | 4,795 | 1, 100 | 7,160 |
| Oct. 7 | 915 | 2,415 | 365 | 4,000 | 1,170 |  | 2, 450 | 6,415 | 4,380 | 415 | 6, 830 |
| Oct. 14 | 930 | 2, 615 | 390 | 3, 970 | 1,190 |  | 2, 510 | 6, 585 | 4, 375 | 300 | 6, 885 |
| Oct. 21 | 1,075 | 2, 840 | 545 | 3, 710 | 1,055 |  | 2,675 | 6,550 | 4, 235 | 360 | 6,910 |
| Oct. 28 | 1,135 | 2,900 | 505 | 3,735 | 1,215 |  | 2, 855 | 6,635 | 4, 490 | 710 | 7, 345 |
| Nov. 4 | 1,145 | 2,990 | 645 | 3, 625 | 1, 390 |  | 3, 180 | 6,615 | 4,255 | 820 | 7,435 |
| Nor. $10^{1}$ | 1,030 | 2,915 | 520 | 3,475 | 1,510 |  | 3, 060 | 6, 390 | 4,195 | 865 | 7, 255 |
| Nov. 18 | 1,015 | 2,925 | 485 | 3, 380 | 1,535 | 5 | 3, 035 | 6, 310 | 4, 195 | 920 | 7, 230 |
| Nov. 25 | -950 | 2, 895 | 400 | 3, 300 | 1,870 |  | 3, 220 | 6, 195 | 3, 840 | 865 | 7,060 |
| Dec. 2 | 920 | 2, 710 | 395 | 3, 285 | 2,015 | 100 | 3, 330 | 6, 095 | 3, 610 | 845 | 6, 940 |
| Dec. 9 | 950 | 2, 695 | 480 | 2,995 | 1,915 | 100 | 3, 345 | 5, 790 | 3, 445 | 1,000 | 6,790 |
| Dec. 16 | 1,060 | 2, 710 | 500 | 2,975 | 1,915 | 200 | 3, 475 | 5, 885 | 3, 385 | 975 | 6, 860 |
| Dec. 23 | 1,050 | 2, 715 | 565 | 2,945 | 1,915 | 200 | 3, 530 | 5, 860 | 3, 290 | 960 | 6, 820 |
| Dec. 30 | 975 | 2, 600 | 790 | 2,850 | 1,815 | 200 | 3, 580 | 5, 650 | 2, 800 | 730 | 6,380 |
| 1939 |  |  |  |  |  |  |  |  |  |  |  |
| Jan. 6 | 980 | 2, 595 | 805 | 2, 665 | 1,765 | 200 | 3, 550 | 5, 460 | 2,630 | 720 | 6, 180 |
| Jan. 13 | 995 | 2, 590 | 810 | 2, 770 | 1, 765 | 250 | 3, 570 | 5, 610 | 2, 660 | 620 | 6, 230 |
| Jan. 20 | 1,065 | 2, 510 | 800 | 2, 830 | 1,685 | 250 | 3, 550 | 5, 590 | 2, 650 | 610 | 6,200 |
| Jan. 27 | 1,005 | 2, 670 | 740 | 2, 525 | 1,700 | 250 | 3, 445 | 5, 445 | 2, 680 | 680 | 6, 125 |
| Feb. 3 | 1,035 | 2, 595 | 720 | 2,495 | 1,635 | 250 | 3, 390 | 5, 340 | 2, 710 | 760 | 6, 100 |
| Feb. 10 | 920 | 2, 580 | 810 | 1,930 | 1,600 | 250 | 3, 330 | 4,760 | 2,180 | 750 | 5, 510 |
| Feb. 17 | 815 | 2, 660 | 890 | 1,900 | 1, 555 | 250 | 3, 260 | 4,810 | 2, 330 | 780 | 5, 590 |
| Feb. 24 | 740 | 2, 505 | 1, 050 | 1,950 | 1,555 | 190 | 3, 345 | 4,645 | 2,120 | 820 | 5,465 |
| Mar. 3 | 615 | 2, 540 | ' 885 | 2, 030 | 1,580 |  | 3, 080 | 4,570 | 2, 390 | 900 | 5, 470 |
| Mar. 10 | 725 | 2, 375 | 900 | 2, 095 | 1, 560 |  | 3, 185 | 4,470 | 2, 370 | 1,085 | 5, 555 |
| Mar. 17 | 650 | 2, 365 | 1,010 | 2,105 | 1,555 | 20 | 3, 215 | 4,490 | 2, 385 | 1, 110 | 5, 600 |
| Mar. 24 | 685 | 2, 470 | -985 | 2, 085 | 1,500 | 70 | 3, 170 | 4,625 | 2, 400 | 945 | 5, 570 |
| Mar. 31 | 795 | 2,595 | 980 | 2,040 | 1,485 | 70 | 3, 260 | 4,705 | 2, 420 | 975 | 5, 680 |
| Apr. 61 | 960 | 2, 630 | 960 | 2, 095 | 1,495 | 70 | 3,415 | 4,795 | 2, 430 | 1,050 | 5,845 |
| Apr. 14 | 995 | 2,580 | 975 | 2, 210 | 1, 550 | 10 | 3, 520 | 4,800 | 2, 340 | 1,060 | 5, 860 |
| Apr. 21 | 1,210 | 2, 570 | 720 | 2, 250 | 1,555 |  | 3,485 | 4,820 | 2, 420 | 1,085 | 5,905 |
| Apr. 28 | 1,350 | 2,535 | 590 | 2, 480 | 1,490 |  | 3, 430 | 5,015 | 2, 535 | 950 | 5,965 |
| May 5 | 1,260 | 2,480 | 640 | 2, 525 | 1,480 |  | 3, 380 | 5,005 | 2,640 | 1,015 | 6, 020 |
| May 12 | 1, 390 | 2, 405 | 640 | 2, 730 | 1,525 |  | 3, 555 | 5,135 | 2,695 | 1, 115 | 6, 250 |
| May 19 | 1,390 | 2, 415 | 610 | 2, 800 | 1,605 |  | 3, 605 | 5, 215 | 2, 820 | 1,210 | 6,425 |
| May 26 | 1,365 | 2, 275 | 485 | 2, 870 | 1,695 |  | 3, 545 | 5,145 | 2, 880 | 1,280 | 6,425 |
| June 2 | 1,315 | 2,150 | 370 | 2, 815 | 1,680 |  | 3, 365 | 4,965 | 2, 920 | 1,320 | 6, 285 |
| June 9 | 1, 210 | 2, 035 | 450 | 2, 755 | 1,675 |  | 3, 335 | 4,790 | 2,905 | 1,450 | 6, 240 |
| June 16 | 1,185 | 2, 175 | 465 | 2, 675 | 1,665 |  | 3, 315 | 4,850 | 2,955 | 1,420 | 6, 270 |
| June 23 | 1,155 | 2, 320 | 420 | 2, 380 | 1,490 |  | 3,065 | 4, 700 | 2,980 | 1,345 | 6,045 |
| June 30 | 1,155 | 2. 390 | 485 | 2. 200 | 1,430 |  | 3, 070 | 4,590 | 2,930 | 1,410 | 6,000 |
| July 7 | 1,405 | 2, 505 | 740 | 2, 385 | 1,355 |  | 3,500 | 4, 890 | 2, 670 | 1,280 | 6, 170 |
| July 14 | 1,465 | 2,675 | 1,135 | 2, 755 | 1,320 |  | 3, 920 | 5,430 | 2, 640 | 1,130 | 6, 560 |
| July 21 | 1, 435 | 2, 480 | 1,170 | 2, 565 | 970 |  | 3, 575 | 5, 045 | 2, 550 | 1,080 | 6,125 |
| July 23 | 1. 130 | 2. 725 | 1,220 | 2, 545 | 950 |  | 3, 600 | 5, 270 | 2, 715 | 1,045 | 6,315 |

${ }^{1}$ Thursday.

Table 38.-Wool top futures: Commitments by type of trader, Friday of each week, Aug. 4 to Dec. 29, 1939
[In thousands of pounds]

| Date | Dealers |  | Top makers |  | Mills |  | Clothing manufacturers |  | Futures commission merchants |  | Industryconnected speculators |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Long | Short | Long | Short | Long | Short | Long | Short | Long | Short | Long | Short |
| Aug. 4 | 1,435 | 2,500 | 1,285 | 2,535 | 890 |  |  |  |  |  |  |  |
| Aug. 11 | 1,485 | 2, 510 | 1,395 | 2, 685 | 1,060 | - |  |  |  |  |  |  |
| Aug. 18 | 1,465 | 2,780 | 1,430 | 2, 580 | 1,065 |  |  |  |  |  |  |  |
| Aug. 25 | 1,385 | 2, 810 | 1,520 | 2, 375 | 1,095 |  |  |  |  |  |  |  |
| Sept. 1 | 1,105 | 2,445 | 1,485 | 2,470 | 850 |  |  |  |  |  |  |  |
| Sept. 8 | 885 | 2,910 | 1,525 | 4,730 | 800 |  |  |  |  |  | 410 |  |
| Sept. 15 | 985 | 2, 250 | 1, 885 | 5,225 | 1, 105 |  |  |  |  |  | 280 |  |
| Sept. 22 | 1,300 | 2,750 | 1,595 | 5, 185 | 635 | 560 | 125 |  | 190 | 175 | 275 | ------ |
| Sept. 29 | 765 | 3, 170 | 1,630 | 5, 245 | 1, 275 | 735 | 650 |  | 190 | 185 | 250 | ------- |
| Oct. 6-- | 845 | 3, 095 | 1,570 | 5, 000 | 1,105 | 760 | 650 |  |  |  | 250 | ------- |
| Oct. 13 | 715 | 2, 820 | 1,550 | 5,170 | 1,165 | 630 | 625 |  |  |  | 150 | ------- |
| Oct. 20 | 705 | 2, 175 | 1,435 | 5, 810 | 1,165 | 930 | 640 |  | 440 | 455 |  |  |
| Oct. 27 | 875 | 1,845 | 1,350 | 5,985 | 1,165 | 1,255 | 640 |  | 330 | 400 |  | ------- |
| Nov. 3 | 800 | 1,840 | 1,360 | 6, 030 | 1, 190 | 1,690 | 650 |  |  |  |  |  |
| Nov. 10 | 965 | 1,990 | 1,420 | 5, 810 | 940 | 1,990 | 650 |  | 255 | 255 |  |  |
| Nov. 17 | 870 | 1,845 | 1, 275 | 5, 945 | 990 | 1,990 | 650 |  | 155 | 155 |  |  |
| Nov. 24 | 945 | 1,935 | 1,150 | 6,240 | 990 | 1,970 | 650 |  | 125 | 125 |  |  |
| Dec. 1 | 1,115 | 2, 515 | 990 | 6, 065 | 990 | 1,930 | 650 |  |  |  |  |  |
| Dec. 8 | 1, 055 | 2, 840 | 990 | 6,315 | 990 | 1,925 | 650 |  | 130 | 130 |  |  |
| Dec. 15 | 1, 165 | 3, 575 | 1,040 | 6, 930 | 925 | 1,900 | 650 |  |  |  |  |  |
| Dec. 22 | 1, 160 | 3, 720 | 970 | 7,095 | 1, 085 | 1,860 | 650 |  |  |  |  |  |
| Dec. 29 | 1, 185 | 4,125 | 795 | 6,680 | 1,145 | 1,775 | 650 |  |  |  |  |  |
| Date |  |  |  |  | Total special accounts |  |  | Total small accounts |  |  | Total |  |
|  |  |  |  |  | Long |  | Short | Lo |  | Short |  |  |
| Aug. 4 |  |  |  |  | 3, 610 |  | 5, 035 | 2,840 |  | 1,415 | 5 6,450 |  |
| Aug. 11- |  |  |  |  | 3, 940 |  | 5, 195 | 2,975 |  | 1,720 | 6,915 <br> 6,870 |  |
| Aug. 18 |  |  |  |  | 3,960 |  | 5, 360 | 2,910 |  | 1,510 |  |  |
| Aug. 25 |  |  |  |  | 4,000 |  | 5,185 | 3, 105 |  | 1,920 | - $\quad 7,105$ |  |
| Sept. 1 |  |  |  |  | 3, 440 |  | 4, 915 | 3,270 |  | 1,795 |  |  |
| Sept. 8 |  |  |  |  | 3, 620 |  | 7,640 | 4,920 |  | 900 | - 8,540 |  |
| Sept. 15 |  |  |  |  | 4,255 |  | 7, 475 | 4,470 |  | 1,250 | 8,540 <br> 8,725 |  |
| Sept. 22 |  |  |  |  | 4, 120 |  | 8, 670 | 5,240 |  | 1690 | 0 9,360 |  |
| Sept. 29 |  |  |  |  |  |  | 9,335 | 5,790 |  | 1,215 | 510,550 |  |
| Oct. 6 |  |  |  |  | 4, 760 |  | 8, 855 |  |  | 510,180 |  |  |
| Oct. 13 |  |  |  |  | 4, 205 |  | 8, 620 | 5, 935 |  |  | 1,520 | 0 10,140 <br> 5 10,775 |  |
| Oct. 20 |  |  |  |  | 4,385 |  | 9, 370 | 6,390 |  | 1,405 |  |  |  |  |
| Oct. 27 |  |  |  |  | 4,360 |  | 9, 485 | 6,750 |  | 1, 625 | 10,77511,110 |  |
| Nov. 3 |  |  |  |  | 4,0004,230 |  | 9,560 | 7,450 |  | 1,8901,815 | - 11,450 |  |
| Nov. 10 |  |  |  |  |  |  | 10,045 |  |  | $5 \quad 11,860$ |  |  |  |  |
| Nov. 17 |  |  |  |  | 4,2303,940 |  | 9, 935 | 7,725 |  |  | 1,730 | 0 11,665 |  |
| Nov. 24 |  |  |  |  | 3, 860 |  | 10,270 | 8, 125 |  | 1,715 | $12,200$ |  |
| Dec. 1 |  |  |  |  | 3, 745 |  | 10, 510 | 8,455 |  | 1,690 |  |  |  |  |
| Dec. 8 |  |  |  |  | 3, 815 |  | 11, 210 | 8,665 |  | 1,270 | $12,480$ |  |
| Dec. 15 |  |  |  |  |  |  | 12, 405 |  | 9, 850 |  | $\begin{aligned} & 13,630 \\ & 13,845 \\ & 13,610 \end{aligned}$ |  |
| Dec. 22 |  |  |  |  |  |  | 12, 675 |  | $9,980$ |  |  |  |  |  |
| Dec. 29 |  |  |  |  | 3, 775 |  | 12, 580 | $9,835$ |  | 1,030 |  |  |  |  |

Table 39.-Wool top futures: Net profit and loss, Sept. 1, 1936, to June 30, 1938, by type of trader and future

| Type of trader | Future, 1936 |  |  | Future, 1937 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | October | November | December | January | February | March | April | May | June | July | August | September | October | November | $\begin{aligned} & \text { Decem- } \\ & \text { ber } \end{aligned}$ |
| Wool growers: <br> Profit |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Profit <br> Loss |  |  | 1,650 |  |  | 3, 340 |  |  |  | 945 |  |  |  |  | 2, 420 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Profit | 770 | 240 | 10,980 | 14, 145 |  | 540 |  | 10,375 | 250 | 8,730 |  | 120 |  |  |  |
| Loss Top makers | 1,225 |  | 10, 325 | 1, | 1,050 | 35, 480 | 375 | 11, 395 | 250 | 9,880 | 1,650 | 120 | 26,585 26,150 | 960 | $\begin{aligned} & 76,840 \\ & 11,350 \end{aligned}$ |
| Profit | 5,625 |  | 18, 175 | 21,355 | 1,125 | 23, 060 | 1,100 | 13, 435 | 950 | 23, 205 |  |  |  |  |  |
| Loss |  | 450 | 46,120 | 47, 765 | 1,125 | 2,610 | 1,760 | 18, 140 | 2,575 | 23,205 20,275 | 3, 480 | 3,850 4,550 | 153, 715 | 5,410 | 72,470 125,905 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Profit | 100 |  | 11,005 | 8, 900 | 165 | 11,050 | 110 | 5,935 | 1,375 | 14, 170 | 5, 900 | 725 | 6,380 |  | 4,890 |
|  |  |  |  |  |  |  |  |  |  | 5,275 | 1,125 |  | 57, 740 | 2,515 | 13, 650 |
| Profit Loss |  |  | 900 |  |  |  | 610 | 1, 425 |  | 675 | 355 | 580 | 1,065 |  |  |
|  |  |  |  |  |  |  |  |  |  | 1,185 | -.------- |  |  |  | 300 |
| Profit | 100 |  | 2,000 |  |  |  | 115 | 3,475 |  | 4,375 |  |  |  |  |  |
| Loss _-............-.-.-.-. |  |  | 5, 850 |  | 240 | 2,050 |  | 300 |  | +660 |  |  | 1,635 |  | 1,660 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Joss | 515 |  | 425 | 1, 725 |  | 7,395 1,490 | 200 | 1,695 7,700 |  | 5,370 | -------- |  | 4,855 | --------- | 1,150 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 150 2,095 | 210 | 300 | 1,640 | ------ | 1,520 | ---- | 1,510 |  | 1,675 |  |  | 8,160 |  | 625 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Profit Itoss |  |  | 6,860 |  |  |  |  | 3,550 |  | 600 |  | 25 | 1,650 |  |  |
|  |  |  |  |  |  | 2, 725 |  | 1,050 |  | 18, 145 |  |  | 150 |  |  |
| Total, profit or loss | 6, 795 | 450 | 52, 295 | 47, 765 | 1,290 | 46,905 | 2,135 | 41, 400 | 2, 575 | 59, 745 | 6,255 | 5,300 | 203, 755 | 5,410 | 160, 055 |


| $\text { 愛 } \frac{\pi}{3}$ |  | $\begin{aligned} & \text { 앙 } \\ & \text { io } \\ & \text { มั } \end{aligned}$ |  |  |  | $\begin{aligned} & \text { Rip } \\ & \text { No } \\ & \text { No } \end{aligned}$ |  |  | 윤 § § -1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
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|  | 荮 |  |  |  |  |  |  |  |  |
|  |  | 18 |  | $\begin{aligned} & 1080 \\ & \text { 융 } \\ & 50 \\ & 50 \end{aligned}$ |  | $\begin{aligned} & \text { \% } \\ & \text { \% } \\ & \text { of } \end{aligned}$ | 8.8 $4 i$ |  | $\begin{aligned} & 8 \\ & 8 \\ & 80 \\ & i 8 \end{aligned}$ |
|  | 这 |  |  |  | ！ |  |  |  |  |
|  |  |  | \％${ }^{\text {B }}$ |  | －9 |  |  |  | 号 |
|  | 就家㞻 | 12P |  |  | $\begin{aligned} & \mathbf{N}_{\substack{10}}^{N_{6}} \end{aligned}$ |  | $\begin{aligned} & 908 \\ & 08 \\ & \text { NH } \end{aligned}$ | $\begin{aligned} & 2.80 \\ & 0 \times 6 \\ & =0 \end{aligned}$ | $\begin{aligned} & 8 \\ & 8 \\ & \text { is } \end{aligned}$ |
|  | 安宫兌 |  |  |  |  |  |  |  | 1 <br> $\vdots$ |
|  | ¢ | － |  |  |  |  | $\begin{aligned} & \text { Bi } \\ & \text { ©O } \\ & \text { nn } \end{aligned}$ | ®o | $\begin{aligned} & \stackrel{\circ}{\infty} \\ & \infty \\ & \infty \\ & \stackrel{0}{0} \end{aligned}$ |
|  |  |  | $\begin{array}{l:l} 10 & \stackrel{0}{\circ} \\ \hline \infty & 0 \end{array}$ |  | 8 \＆ or |  |  |  | $\begin{aligned} & \AA \\ & \AA_{\infty} \end{aligned}$ |
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|  | き | $\begin{aligned} & \text { Na } \\ & \text { No } \\ & \text {-n } \end{aligned}$ |  |  | $\begin{aligned} & \text { 20: } \\ & \text { No } \\ & \text { nin } \end{aligned}$ | $\begin{aligned} & \infty=0 \\ & \infty \\ & 0 \\ & 0 \end{aligned}$ | $\begin{aligned} & \stackrel{208}{98} \\ & -6 \end{aligned}$ | $\begin{aligned} \hline 80 \\ \text { in } \\ \text { oin } \end{aligned}$ |  |
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|  | 先 | $\stackrel{8}{6}$ |  |  | $\begin{aligned} & 108 \\ & \text { mik } \\ & \text { ins } \end{aligned}$ | R20 | $\begin{aligned} & \text { 앙 } \\ & -i+0 \end{aligned}$ |  | $\stackrel{8}{9}$ |
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|  | 高范 |  |  | $\begin{aligned} & 8 \\ & 0 \\ & \hline 10 \end{aligned}$ |  | 8 |  |  | 10 0 $=1$ |
|  |  |  |  |  |  |  |  |  |  |


[^0]:    ${ }^{1}$ The present report has been prepared in the Division of Economic Analysis of the Commodity Exchange Administration under the immediate direction of Blair Stewart, formerly in charge of the division, and now professor of economics, Reed College, Portland, Oregon. He wrote the main portions of the report. Much of the basic investigational work was done by E. S. Haskell, and parts of the report were written by him. The entire study was reviewed by W. Edwards Beach, now in charge of the division. Credit is due also to Anna R. Sullivan, and other members of the staff,
    ${ }^{2}$ Wheat, corn, oats, barley, rye, flaxseed, and grain sorghums (by act approved Sept. 21, 1922); cotton, rice, millfeeds, butter, eggs, and potatoes (by amendment of June 15, 1936); wool tops (by amendment approved Apr. 7, 1938); lard, tallow, cottonseed oil, peanut oil, soybean oil, and all other fats and oils, cottonseed meal. cottonseed, peanuts, soybeans, and soybean meal (by amendment approved Oct. 9, 1940).

[^1]:    3 The information in this and the succeeding section, and much of the information in the section on Price Relationships is based on secondary sources. All other data in the report have been obtained through special investigations by the Commodity Exchange Administration.
    ${ }^{4}$ National Association of Wool Manufacturers. trading in wool futures. Natl. Assoc. Wool Mfrs. Bul., 20: 402-403. 1890.
    ${ }^{5}$ Mcp[herson]. J[OHN] B[puce]. A wool "Futures" market suggested for the unjted states, Natl. Assoc. Wool Mfrs., Bul. 57: [325]-345. 1927. See pp. 325-326, 329-330.

[^2]:    6 See p. 335 of reference cited in footnote 5.
    ${ }^{7}$ Report by Andre E. Soyous, general secretary, Federation of French Manufacturers and Merchants, translated in Daily News Record, April 22, 1927.

[^3]:    ${ }^{8}$ Du Plessis, A. F. the marketing of wooi.. 337 pp., illus. London, New York, etc. 1931. See pp. 267-270.
    ${ }^{\circ}$ See p. 339 of reference cited in footnote 5.
    ${ }_{10}$ See p. 340 of reference cited in footnote 5.

[^4]:    ${ }^{11}$ Effective on contracts maturing in January 1941 and thereafter the rules provide that tenderable tops may not contain more than $11 / 2$ percent of reworked wool or waste originating "strictly from the combing process," except for the unlimited inclusion of waste from the particular lot in process. The prohibition on mineral oil was removed on contracts for January 1941 and thereafter and it was provided that tops containing olive oil or an oil approved by the National Association of Wool Manufacturers are tenderable.

[^5]:    12 Since February 1, 1940, the reported certificated stocks have included certificated tops stored in approved commission combers' warehouses as well as in approred public warehouses. Since March 15, 1940, this information has been published weekly.

[^6]:    ${ }^{1}$ Other classes of members than those shown are either speculators or hedgers, straddlers and spreaders. Such classes are required to provide the same margins as correspnnding classes of nonmembers.
    2 The term "spreader" used in the grain trade is synonymous with "straddler"-the term used in the cotton trade.
    ${ }^{3}$ At members' discretion margins may not be required on each trade in any day for an established account provided the net position at end of day is margined as required by the rules. On cotton contracts limited credit may be extended to hedgers and straddlers.
    ${ }^{4}$ Credit may be extended.
    ${ }^{5}$ Except that margins are required on net positions exceeding 25,000 bushels in all grains and with all clearing members.
    ${ }^{6}$ Extension of credit permitted not in excess of $\$ 5$ a bale, or a total of $\$ 10,000$ through 1 broker.
    7 Exemption from original margin rule permitted only when a nonclearing correspondent member declares in writing to the clearing member that all trades in the account carried on an undisclosed basis are for customers and that proper margins or credits are maintained with the nonclearing member.

[^7]:    ${ }^{13}$ Raw wool is quoted on both a grease basis and a clean or scoured basis, the difference representing estimated shrinkage or loss in weight on remoral of dirt, grease, and other foreign substances.
    ${ }^{14}$ The dominant future is the future which usually has a greater volume of trading and larger open contracts than any other future. When no future is dominant by both these measures, open contracts are ordinarily considered the better test. Because open contracts for wool top futures are not available prior to September 1936, volume of trading has been used as the characteristic on which dominance is determined for the whole period 1931-39.

[^8]:    ${ }^{1}$ Dominant future, average of daily closing prices. From Daily Market Report, New York Wool Top Exchange.
    ${ }_{2}$ In oil, at Boston. Average of weekly quotations from Boston Commercial Bulletin.
    ${ }^{3}$ Clean basis, at Boston. Source: Bureau of Agricultural Economics and Agricultural Marketing Service.
    ${ }_{8}^{4}$ Future minus Territory fine staple wool.
    ${ }^{5}$ A verage fine domestic spot top minus future.
    ${ }^{6}$ A verage fine domestic spot top minus Territory fine staple wool.
    ${ }^{7}$ May-December.

[^9]:    ${ }^{15}$ Garside, Alston Hill. wool and the wool trade. 331 pp., illus. New York. 1939. See pp. 263-267.

[^10]:    ${ }^{16}$ Error accounts of five futures commission merchants are not included in this total. Their trades and commitments, however, have been included in the various tables. Their trades constituted only threetenths of 1 percent of the total.

[^11]:    ${ }^{17}$ It is necessary to indicate that the phrase "in the market" does not have a uniform meaning for all dates shown on figure 8 and table 12. On the first and last dates given the number of traders is the number having commitments in the market. On the intervening dates the number given is the total of those whose first trade came before the given date, and whose last trade came after the date. Some of these would not have commitments on the given date. The number of traders shown for the intervening dates, therefore, may be looked upon as the maximum who might have had commitments on the dates specified.

[^12]:    ${ }^{18} \mathrm{An}$ accurate calculation of commissions paid would be very difficult to obtain because the amounts of commission paid vary considerably. The person who is not a member of the exchange must pay at least the minimum full commission, which for wool tops is $\$ 30$ per contract of 5,000 pounds, including both purchase and sale (plus $\$ 2.50$ for residents outside the United States and Canada). A member, either class A or class B, may have exactly the same services performed at half commission, or $\$ 15$. If an A member executes the trade in the ring himself he pays the clearing member only the clearing fee of $\$ 1.80$. The class A member executing his own trade and clearing it has the clearing charge of the clearing house, 20 cents, to pay. If he has a floor broker execute the trade, however, the brokerage fce of $\$ 3$ must be added to his outlay. Ihese figures do not include the cost of providing margins, nor the bookkeeping and other expenses, such is exchange fees and other costs of membership, which enter into the cost of trading on a futures exchazige.

[^13]:    ${ }^{19}$ The term "trade" very commonly used with respect to futures transactions is not a clear-cut concept which can usefully be employed in profit or loss calculations. Presumably it refers to the situation in which a trader in a single transaction acquires a position which he holds for a time and then liquidates in a single transaction. In practice, however, extremely complex situations are found. Positions may be accumulated by means of a number of transactions, and may increase and decrease in size a number of times before they are finally liquidated. It seems hardly appropriate to refer to such an extensive operation as a "trade."

[^14]:    ${ }^{1}$ The difference between the total value of all purchases and sales of all futures combined for each trader.
    2 Purchases and sales.
    ${ }^{3}$ Traders buying and selling on the same day, with no position at the close.
    ${ }^{4}$ Traders whose long and short positions were evenly balanced.

    - One trader with neither profit nor loss (ignoring commissions) is not included.

[^15]:    ${ }^{1}$ The profits and losses of individual traders in each future.
    ${ }^{2}$ Includes 15,000 pounds which were bought and sold at same price.
    ${ }^{3}$ Includes 85,000 pounds which were bought and sold at same price.
    ${ }^{4}$ Includes 10,000 pounds which were bought and sold at same price.
    ${ }^{5}$ Includes 5,000 pounds which were bought and sold at same price.
    ${ }^{6}$ Includes 65,000 pounds which were bought and sold at same price.
    ${ }^{7}$ Includes 100,000 pounds which were bought and sold at same price.

[^16]:    "See table 10.

[^17]:    ${ }^{1}$ Profits and losses computed as differences between buying and selling prices only.
    2 All profits of less than $1 / 2$ cent per pound counted as losses as a rough adjustment for commission charges.
    ${ }^{3}$ Includes trader who bought and sold at same price.

[^18]:    ${ }^{1}$ Foreign markets，a verage of 2 days－reported on Sept． 1 and 2．Since Sept．1939，both foreign exchanges have been＂closed by compensation until further notice．＂
    ${ }^{2}$ Domestic markets average 360 trading days；foreign markets average 266 trading days．

[^19]:    ${ }^{21}$ Including the 3 firms which, directly or indirectly, had both $A$ and $\mathrm{B}^{-}$membership representation.
    ${ }^{22}$ Not including traders affiliated with the 3 firms which had, directly or indirectly, both A and B membership representation.

[^20]:    ${ }^{23}$ This is subject to qualification. Pass-outs need not be cleared and there were some so-called "curb trades" which were not cleared. A pass-out is possible when a floor trader has bought and sold the same quantity of a particular future at the same price on the same day for his own account. One deficiency of this study is that it started from clearing house records and does not include pass-outs. The "curb trades" were uncleared trades discovered on futures commission merchants' books.

[^21]:    ${ }^{24}$ Since this was written a grease wool futures contract has been established by the New York exchange, and trading began on March 17, 1941.

[^22]:    ${ }^{1}$ Dominant future, average of daily closing prices. From Daily Market Report, New York Wool Top Exchange. Beginning November 1936 prices are for "new" contract.
    ${ }^{2}$ In oil, at Boston. Average of weekly quotations from Boston Commercial Bulletin.
    ${ }^{3}$ Clean basis, at Boston. Source, Bureau of Agricultural Economics and Agricultural Marketing Service.
    ${ }^{4}$ Future minus Territory fine staple wool.
    ${ }^{5}$ A verage fine domestic spot top minus future.
    ${ }^{6}$ Average fine domestic spot top minus Territory fine staple wool.

[^23]:    ${ }^{2}$ Includes 60,000 pounds "curb"" trades.
    ${ }^{3}$ Includes 70,000 pounds "curb" trades.

[^24]:    "Includes 20,000 pounds "curb"' trades.
    6 Includes 20,000 pounds "curb" trades.
    ${ }^{7}$ Includes 5,000 pounds "curb" trades.
    ${ }^{8}$ Includes 5,000 pounds "curb" trades.

[^25]:    ${ }_{1}$ Volume of trading compiled from records of the Ncw York Cotton Exchange Clearing Association. Open contracts compiled from records of the clearing members.
    ${ }_{3}^{2}$ Includes inactive futures.
    ${ }_{3}$ Gross contracts. Notices were issucd on July 5 for 15,000 pounds, July 6 for 100,000 pounds, July 7 for 60,000 pounds, July 15 for 20,000 pounds, July 19 for 15,000 pounds, July 20 for 25,000 pounds, and July 22 for 5,000 pounds. Open contracts are reduced upon delivery on the fifth business day following the stopping of the notice.

[^26]:    ${ }^{1}$ Data compiled from records of the New York Cotton Exchange Clearing Association. Transferable notices and uncleared "curb" trades are excluded.

[^27]:    ${ }^{2}$ Total trades as compiled from records of clearing members were 325,000 pounds for the October future and 15,000 pounds for the November future.
    ${ }^{3}$ February total includes 85,000 pounds traded on Jan. 28, 1938, but not cleared until Feb. 2.

[^28]:    ${ }_{1}$ Prices are given 1 week previous to and 1 week following the period of the dominance of the future.
    2 Beginning Nov. 13, 1936, prices were quoted for both old and new style contracts in the March 1932 future. Prices given in this table are for the old style contract.

[^29]:    ${ }^{1}$ Thursday.

