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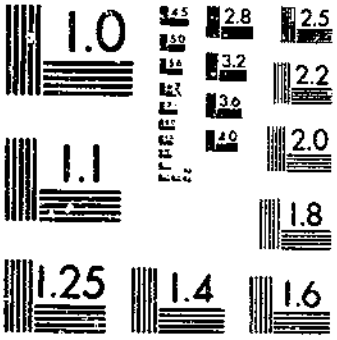
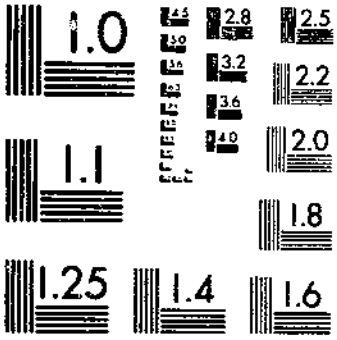


MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A



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NAVAL STORES STATISTICS 1900-1954

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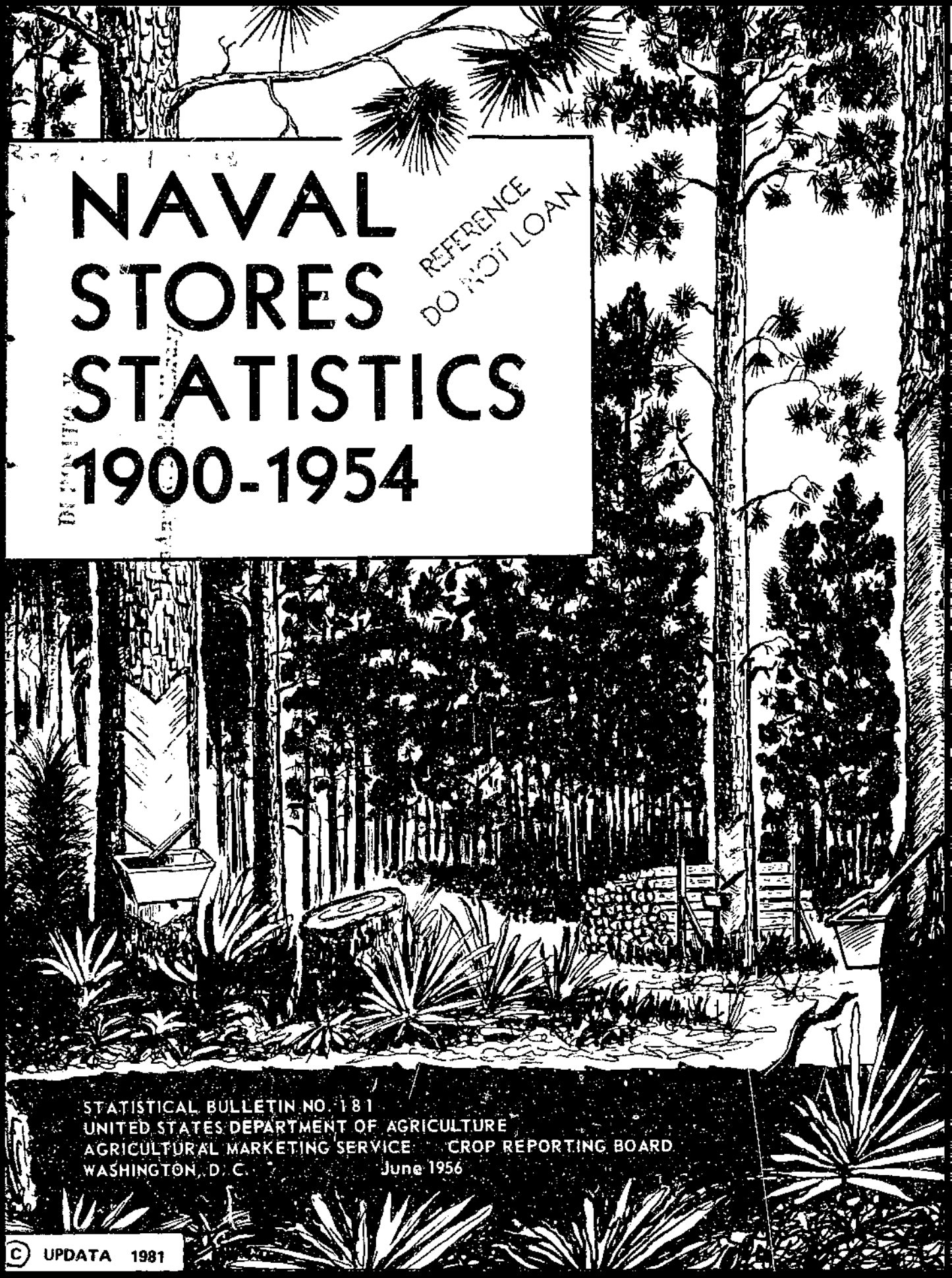

STATISTICAL BULLETIN NO. 181
UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE CROP REPORTING BOARD
WASHINGTON, D. C. June 1956

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CONTENTS

	Page
Introduction	1
Tables	
Annual	
Production	7
Supply and distribution	10
Consumption	16
Miscellaneous products	21
Price and value	22
Still output by States	24
Monthly	
Production	26
Stocks	28
Price	32

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NAVAL STORES STATISTICS 1900-1954

Naval stores--the name remains the same as in colonial days but the products and uses change with the times. From calking seams and treating rigging of wooden vessels to an oil additive in modern jet motors, the adaptable naval stores products continue in the parade of progress. The naval stores industry is commonly referred to as "the old industry with the new look."

The statistical history of the industry from 1900 through 1954 is brought together in this publication. Production, consumption, and stocks data since 1947 shown here were compiled and published by the Agricultural Marketing Service. From 1932 through 1946 comparable data were collected by the Bureau of Agricultural and Industrial Chemistry. Prior to that time records consist mainly of trade estimates as published in Gamble's International Naval Stores Yearbook. Imports and exports were compiled by the Bureau of the Census.

Naval stores embrace all products of pine gum, and related products derived from pine wood. Turpentine and rosin have been the major naval stores products since the decline of wooden ships. Other products are pine tar, pine oil, rosin oil, dipentene, and tall oil.

The two major components of the industry are gum and wood. The use of the term gum naval stores probably arises from the fact that the oleoresin exuded from the living tree in the process of being worked is commonly referred to as gum. Wood naval stores are obtained from pine wood--either pulp, or resin-saturated stumps, trunks, and limbs. There are three segments of the wood industry--steam distilled, destructively distilled, and sulphate. These are primarily extraction processes.

GUM INDUSTRY

Gum naval stores are obtained by systematically chipping or streaking living trees at given intervals and channeling the flow of gum into receptacles attached to the trees. The crude gum (oleoresin) is collected periodically and distilled. The joint products of the distillation are gum turpentine and rosin. The gum naval stores operation is defined as an agricultural pursuit and until the early 1920's was practically the only source of naval stores.

The Southeast Coastal Area of the United States has long been a major center of world production of naval stores. With the depletion of the virgin stands of longleaf pine in the Carolinas during the last quarter of the nineteenth century, the industry moved south to Georgia and Florida, with the other Gulf Coast States also producing heavily. As the virgin forests in those areas were cut over, production methods were changed, and second-growth pines were worked. The change involved a reduction in the number and width of streaks and the use of attached cups instead of boxes cut into the trunks of the trees. All pine gum was processed in several hundred fire stills until around 1940.

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Since 1940, modern central distilling plants with gum-cleaning equipment have revolutionized the gum industry. Fire stills gradually dropped out of the picture, and in 1956 only a few were in operation, mostly on an off-and-on basis. In earlier years, practically all naval stores operators distilled their own gum and sold turpentine and rosin. Later, producers sold their gum to central stills.

Bark chipping and acid treatment of the streaks are recent developments. Fresh streaks sprayed with sulphuric acid continue to produce gum longer than untreated streaks. This has made it possible for a chipper to work nearly twice as many trees and to approximately double his output of gum for the season. About 60 percent of the trees were acid treated in 1954, compared with only 10 percent in 1950.

During the transition from operating fire stills to selling gum to central stills, and from weekly to biweekly chipping and acid treatment, another significant development was taking place in naval stores and other southern pine areas. Paper mills were moving south and buying up vast acreages of pulp wood land, and in 1956 pulp mill holdings were very large. While these mills added a new source of naval stores (discussed later), gum turpentining operations on their holdings were largely discontinued. This accounted for some of the decline in gum output from 1940 to 1954. While it is agreed that the 1954 and 1955 level of gum naval stores production can be stepped up some without working pulp mill holdings, any sustained material increase would have to come from such acreage.

WOOD INDUSTRY

In the wood naval stores industry, both the steam and destructive distilling segments of the industry use "lightwood" stumps, trunks, and limbs. The sulphate segment of the industry, which manufactures kraft paper, uses pulpwood.

Steam Distillation

A new source of turpentine and rosin was developed early in the 1900's. Lumbering operations left high stumps and other wasted pine wood. As the sapwood rotted, only resin-saturated wood remained. While some of this wood was used on farms as fuel and fence posts, and in making pine tar, woods fires were making heavy inroads into the supply. Pine stumps hindered cultivation in fields. The steam distilling method was developed to utilize these wood resources. The stumps and other heartwood are transported to central plants, chipped, shredded, and subjected to solvent extraction with steam distillation of the extract.

On a weight basis, about 79 percent of steam distilled production is rosin, 9 percent turpentine, 8 percent pine oil, and 4 percent dipentene and other monocyclic hydrocarbons. The spent wood remaining after extraction of the solvents is used for fuel or in making insulating materials.

In 1910, the initial year of operation, wood rosin production totaled 11,000 drums. During the next 10 years of research in the development of economical processing methods and acceptable products, production was comparatively small. By 1925, wood rosin production was nearly one-fifth as large as gum rosin. In 1935, wood rosin production totaled 460 thousand drums, more than one-third as large as gum output. About that time, processes were developed for refining wood

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rosin to pale grades. Refinement to such grades materially expanded the market for wood rosin. The upward trend in wood rosin production has continued, tending to level off since 1950 at about 1.3 million drums. In every year since 1945, the output of wood rosin has exceeded that of gum rosin and in 1954 it was $2\frac{1}{2}$ times as large.

Unlike the gum industry, which requires a large amount of hand labor, the steam distilling industry is highly mechanized. Stumps are knocked out by heavy bulldozers, loaded on trucks, and hauled to plants or railroad sidings. Large capital investments are required. Attention to specific needs of users and development of new products, uses, and markets have played a significant role in moving an increasing volume of steam distilled products into consuming channels in competition with gum products.

From 1910 through 1955, the accumulated production of steam distilled rosin totaled approximately 25 million drums. On the basis of a yield of 350 pounds of rosin per ton of stumps, about 37 million tons of stumps and heartwood were consumed by 1956.

Destructive Distillation

The destructively distilled naval stores industry is comparatively small. Resin-saturated pine wood is placed in a retort and heated to the point of carbonization. The major products obtained by this process are charcoal, pine tar, tar oils, and pitch. Inasmuch as the resin content of the wood undergoes partial decomposition, forming tars and pitches, no rosin is produced. A few of the destructive distilling plants recover some turpentine, dipentene, and pine oil.

Sulphate

Production of paper by the sulphate process results in two byproducts that are classified as naval stores--sulphate turpentine and tall oil. In the pulping process, the pulpwood is debarked, chipped, and cooked in a weak sulphuric acid solution. Turpentine vaporizes and is condensed while the resins from which tall oil is made are skimmed off after the cooking is completed.

For many years the naval stores byproducts of the sulphate industry were used at plants as fuel or were dumped. Refining processes were developed and the sulphate wood industry is now regarded as the major source of naval stores for the future. Production at new mills and more complete recovery at plants already in operation are expected to fill some of the gap left when steam distilled production declines. In 1955, the output of sulphate turpentine exceeded that of either gum or steam distilled turpentine. If the output of resins at all mills in operation in 1955 were fully recovered, the resin acid (rosin equivalent) content of tall oil would be nearly equal to gum rosin output and about one-third that of steam distilled. As the demand for kraft paper and newsprint spirals, the sulphate industry continues to expand.

PRODUCTION

All naval stores production statistics, except for rosin oil, are now compiled monthly. Annual totals, therefore, are the sums of the respective monthly totals. Publication of monthly production began with the 1948 crop year. Formerly, production data were compiled quarterly, semi-annually, or annually.

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Sulphate turpentine production data in this publication have been converted to a refined equivalent basis. All plants report crude sulphate turpentine production. The reported data are multiplied by a factor of 0.80 to convert to a refined basis. This was about the average recovery in refining at the time sulphate turpentine came into general use.

STOCKS

Turpentine and rosin stocks at all production plants are reported monthly. Stocks of gum turpentine and rosin and sulphate turpentine at refineries and major southern concentration points are also covered. Concentration points include major ports and all locations holding Commodity Credit Corporation stocks. In addition, stocks of steam and destructively distilled naval stores on consignment to dealers and consumers are reported. Sulphate stocks, as published, are the total of refined stocks as reported plus reported crude stocks multiplied by the 0.80 conversion factor.

Stocks at all locations other than at retail establishments are compiled as of September 30 for the semiannual report and as of March 31 for the annual report. For those dates, gum and wood turpentine and rosin stocks are shown separately for (1) distribution points by regions--eastern, central, and western; (2) production and southern concentration points broken down into two categories--stocks controlled by CCC and all other stocks; and (3) industrial plants. As a supplement to this overall breakdown, stocks of wood, by kinds, and gum are shown separately for production points. In the turpentine supply and distribution tables, only combined totals for all wood turpentine are given.

On September 30, 1954, and March 31, 1955, locations included in the monthly report of stocks accounted for about 81 percent of turpentine at all locations and 94 percent of all rosin stocks. Coverage of a limited number of plants, therefore, accounts for a major portion of all stocks. This fact has made the monthly stocks report valuable to users of naval stores statistics.

Interplant operations and other factors make it difficult to reconcile some of the categories of stocks shown in the semiannual report with the monthly report for the same date.

Stocks of sulphate turpentine at refining plants are shifted to the industrial plant category for the semiannual report. Consigned wood stocks included in the monthly report are credited to the respective dealer or consumer locations.

TURPENTINE CONSUMPTION

Gum and steam distilled turpentine are used principally for thinning oil base paints and varnish at the time of application. Sulphate turpentine is used mainly for making chemical raw materials, primarily pinene.

Paint and varnish manufacturers have largely shifted from turpentine to mineral spirits. While mineral spirits are also used for on-the-job thinning, most home owners and private painters continue to use turpentine for thinning paints at the time of application. Improvements in merchandising and packaging --mainly in small, convenient, attractive containers--backed by a national advertising campaign have played a major role in maintaining this demand for turpentine. In 1954, the domestic disappearance of turpentine other than reported industrial consumption accounted for about 57 percent of the total.

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Important industrial uses of turpentine other than in making chemical raw materials are in pharmaceuticals, such as cough medicines and counterirritants, and in shoe polish and shoe materials. Chemical raw materials, however, accounted for more than 90 percent of all reported industrial uses in 1954. The major chemical use of turpentine is in the production of pinene, which is consumed in making synthetic camphor (a raw material in many medicines, celluloid, and smokeless gunpowder), synthetic resins, and isoprene. While the terpene chemicals are used in many products, insecticides provide one of the major outlets. In 1954, chemical and pharmaceutical consumption of turpentine amounted to more than 40 percent of the domestic disappearance of all turpentine.

ROSIN CONSUMPTION

The major uses of rosin are for "sizing" or impregnating various types of paper and paperboard; in protective coatings--such as varnishes, enamels, and paints; in chemicals and pharmaceuticals; and in yellow laundry soap. Minor uses include adhesives and plastics, linoleum and floor coverings, oils and greases, paint dryers, rubber compounding materials, miscellaneous railroad and shipyard consumption, printing inks, and shoe materials.

Paper and paper size have accounted for 25 to 35 percent of the domestic disappearance of rosin in practically every year since 1922, when records of use were begun. Beginning in 1948 more rosin has been consumed in paper and paper size than in any other use.

Varnishes, paints, ester gum, and synthetic resins have accounted for 20 to 30 percent of total rosin use in the United States in practically every year of record. The largest quantity of rosin consumed in manufacturing this group of products was 422,000 drums in 1950.

Chemicals have become an important outlet for rosin in a comparatively short time, rising from 10 percent of reported consumption in 1936 to a peak of 29 percent in 1953 and 1954.

In 1950-54, use of rosin in soap averaged less than 5 percent of the total rosin consumed compared with 29 percent in 1922-26. The outlet for rosin in soap has been largely for yellow bar laundry soaps, which have declined in popularity.

CONSUMPTION SURVEYS

Statistics on consumption by industries are obtained by use of two inquiries, (1) survey of firms using turpentine and rosin as raw materials in making chemically modified or derived naval stores products, primarily for sale and (2) survey of plants using turpentine and rosin in manufacturing specific products.

The major wood naval stores producing companies and a limited number of firms producing gum naval stores use some of their output of turpentine and rosin in producing derived or modified naval stores products. For example, Company A might use its entire output of rosin, and some rosin purchased from other producers, in making paper size, resinates, ester gum, and specialty products for the rubber industry. Company B might use some rosin in making resinates and sell the remainder of its output of rosin as such. These companies report semiannually the quantity of rosin used in making ester gum and synthetic resins, paper size, products for use by the rubber industry, rosin oil, gloss oil, and all

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other modified or derived rosin products. Plants with refining facilities also report the quantity of turpentine consumed in making pinene and other chemicals. The number of firms producing naval stores and utilizing a part, or nearly all, of their output in making derived naval stores products is comparatively small.

In addition to the producer - processor reporters, there are approximately 1,000 establishments on the general consumer list, which includes the following industries: Paint and varnish, foundries, insecticides, adhesives, soap, and other groups consuming rosin and turpentine. These companies report the quantity of turpentine and rosin consumed and also give the specific products made. Consumers on this list are requested not to report the consumption of modified or derived rosin products purchased as such and of B-wood resin.

The total consumption of rosin by the paper industry is the quantity of rosin used in making size by companies manufacturing rosin size and rosin purchased as such by paper mills and used in processing their own size. Statistics on the consumption of rosin by the rubber and synthetic industries are compiled in a similar manner.

The overall procedure used in arriving at the chemical and pharmaceutical total should be of assistance in understanding and appraising the data in question as well as the data for some other industry groups. Prior to 1951, all B-wood resin production was placed in this category. Since that time B-wood resin used in making paper size has been placed in the paper category.

For statistical purposes, figures on steam distilled rosin are in terms of drums of FF rosin. Most of this rosin is refined to pale grades before it is either used in the production of derived products at the plant where produced or sold as rosin. In refining the FF wood rosin to pale grades, B-wood resin is produced and accounts for around 15 percent of the FF rosin. Inasmuch as FF wood rosin is used as a portion of the total supply of rosin, it was necessary to place B-wood resin in one of the consumption categories to balance supply and disappearance. Since it is a specialty product used in several industries, it was deemed advisable to place it in the chemical and pharmaceutical category. Stocks and consumption of B-wood resin other than that used in paper size by producing firms are not reported.

Most of the rosin consumption placed in the chemical and pharmaceutical industry group is reported on the producer-processor schedule. After reporting on the specific uses of rosin, processors report rosin used in making all other modified or derived rosin products. Rosin used in making similar products reported by firms on the general consumer list is also placed in the chemical and pharmaceutical industry group.

The downward trend in some of the industry categories may reflect a shift from the use of rosin as such to the use of a specialty or modified rosin accounted for in the chemical and pharmaceutical group. The decline in some groups may also be due to the use of purchased ester gum or synthetic resins. This is particularly true of the paint and varnish category. Other than for the industries making ester gum and synthetic resins, rubber, paper, and chemicals and pharmaceuticals, consumption as shown in this publication relates to the amount of rosin used as such or, after processing, in manufacturing or finishing the particular industry products.

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Table 1.--Turpentine and rosin: U. S. production, annual, 1900-1954

Year beginning April 1	Turpentine						Rosin			
	Gum	Wood				Total gum and wood	Gum	Steam distilled	Total	Resin content of tall oil 1/
		Steam distilled	Destructively distilled	Sulphate	Total					
	Thou. barrels 2/	Thou. barrels 2/	Thou. barrels 2/	Thou. barrels 2/	Thou. barrels 2/	Thou. barrels 2/	Thou. drums 3/	Thou. drums 3/	Thou. drums 3/	Thou. drums 3/
1900.....	620	---	---	---	---	620	1,652	---	1,652	---
1901.....	600	---	---	---	---	600	1,600	---	1,600	---
1902.....	581	---	---	---	---	581	1,548	---	1,548	---
1903.....	545	---	---	---	---	545	1,452	---	1,452	---
1904.....	600	---	---	---	---	600	1,600	---	1,600	---
1905.....	590	---	---	---	---	590	1,571	---	1,571	---
1906.....	588	---	---	---	---	588	1,566	---	1,566	---
1907.....	585	---	---	---	---	585	1,824	---	1,824	---
1908.....	750	---	---	---	---	750	2,000	---	2,000	---
1909.....	600	---	---	---	---	600	1,600	---	1,600	---
1910.....	615	2	---	---	2	617	1,638	11	1,649	---
1911.....	660	4	---	---	4	664	1,758	19	1,777	---
1912.....	715	15	---	---	15	730	1,905	79	1,984	---
1913.....	675	20	---	---	20	695	1,799	103	1,902	---
1914.....	560	6	---	---	6	566	1,492	27	1,519	---
1915.....	530	7	---	---	7	537	1,412	31	1,443	---
1916.....	610	16	---	---	16	626	1,626	71	1,697	---
1917.....	474	28	---	---	28	502	1,250	128	1,378	---
1918.....	340	19	---	---	19	359	909	88	997	---
1919.....	367	21	5	---	26	393	996	92	1,088	---
1920.....	489	16	5	---	21	510	1,287	71	1,358	---
1921.....	486	9	5	---	14	500	1,323	42	1,365	---
1922.....	520	33	5	---	38	558	1,409	133	1,542	---
1923.....	565	43	8	---	51	616	1,534	161	1,695	---
1924.....	521	57	8	---	65	586	1,404	206	1,610	---
1925.....	478	59	8	---	67	545	1,288	228	1,516	---
1926.....	510	70	9	---	79	589	1,388	292	1,680	---
1927.....	650	77	10	---	87	737	1,765	328	2,093	---
1928.....	560	78	9	2	89	649	1,522	345	1,867	---
1929.....	625	86	10	3	99	724	1,696	374	2,070	---

Continued

See footnotes at end of table, page 8.

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Table 1.--Turpentine and rosin: U. S. production, annual, 1900-1954--Continued

Year beginning April 1	Turpentine						Rosin			
	Gum	Wood				Total gum and wood	Gum	Steam distilled	Total	Resin content of tall oil 1/
		Steam distilled	Destructively distilled	Sulphate	Total					
	Thou. barrels 2/	Thou. barrels 2/	Thou. barrels 2/	Thou. barrels 2/	Thou. barrels 2/	Thou. barrels 2/	Thou. drums 3/	Thou. drums 3/	Thou. drums 3/	Thou. drums 3/
1930.....	599	76	6	4	86	685	1,621	351	1,972	---
1931.....	500	52	5	7	64	564	1,357	256	1,613	---
1932.....	501	60	4	8	72	573	1,363	296	1,659	---
1933.....	526	81	6	9	96	622	1,431	407	1,838	---
1934.....	510	77	5	10	92	602	1,387	396	1,783	---
1935.....	497	89	5	12	106	603	1,361	460	1,821	---
1936.....	483	122	7	23	152	635	1,287	579	1,866	---
1937.....	518	136	7	39	182	700	1,388	643	2,031	20
1938.....	534	129	5	41	175	709	1,467	610	2,077	14
1939.....	383	159	7	56	222	605	1,054	760	1,814	23
1940.....	344	161	7	54	222	566	939	778	1,717	32
1941.....	285	190	9	65	264	549	791	917	1,708	46
1942.....	322	148	6	84	238	560	869	787	1,656	68
1943.....	288	125	4	91	220	508	784	679	1,463	122
1944.....	245	117	5	104	226	471	692	626	1,318	139
1945.....	244	129	5	110	244	488	694	4/758	1,452	163
1946.....	270	168	5	127	300	570	752	968	1,720	194
1947.....	294	209	4	134	347	641	828	1,163	1,991	204
1948.....	324	207	3	125	335	659	921	1,155	2,076	215
1949.....	323	200	3	147	350	673	925	1,099	2,024	191
1950.....	272	237	6	194	437	709	798	1,339	2,137	316
1951.....	246	230	5	203	438	684	716	1,333	2,049	324
1952.....	217	175	3	170	348	565	638	1,083	1,721	267
1953.....	178	193	3	164	360	538	532	1,213	1,745	274
1954.....	176	208	2	232	442	618	528	1,342	1,870	347

1/ Converted from crude tall oil production, as compiled by the Bureau of the Census to equivalent drums of rosin on the basis of 45 percent resin acids.
2/ Barrels of 50 gallons.
3/ Drums of 520 pounds net.
4/ Beginning with 1945 total primary production of FF wood rosin.

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FIGURE 1.

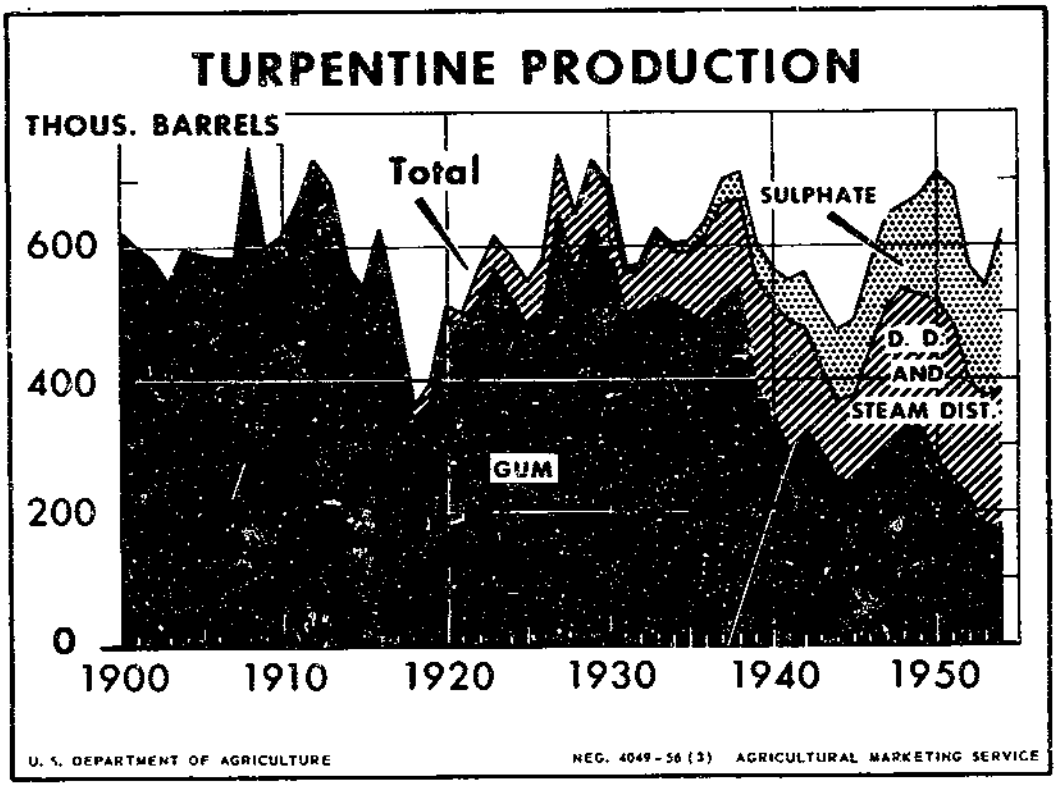

FIGURE 2.

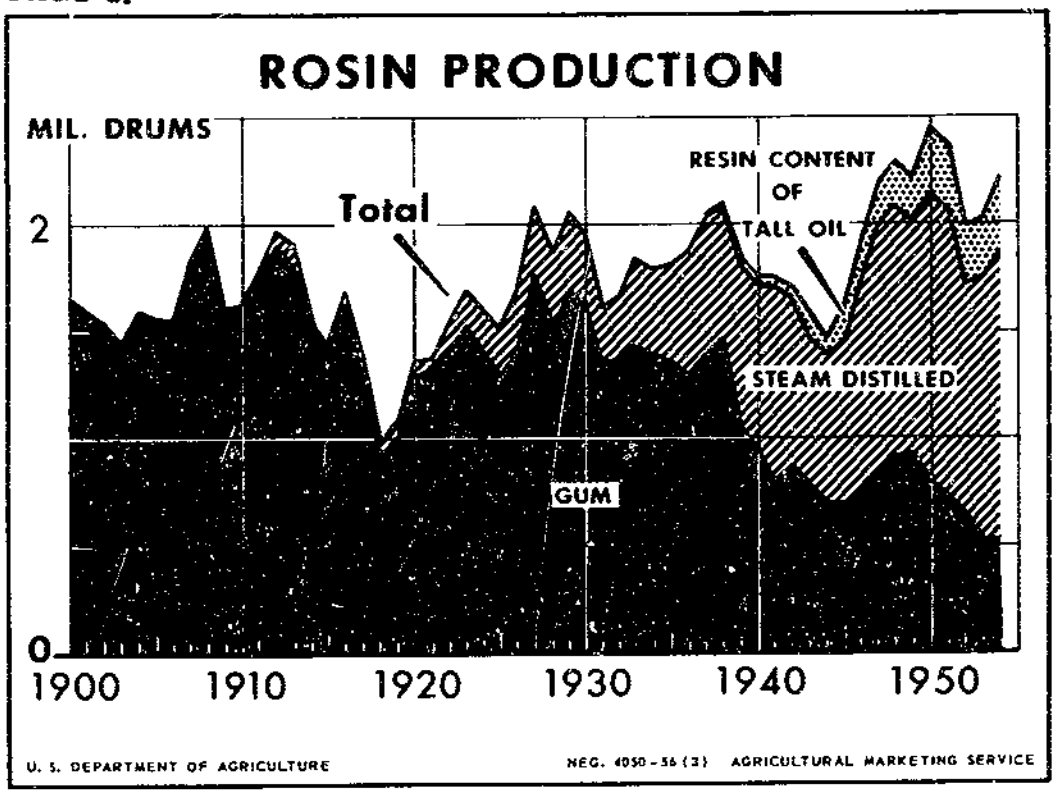

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Table 2.--Turpentine: U. S. supply and distribution, annual 1922-1954
(Thousand barrels of 50 gallons)

Year beginning April 1	Supply				Distribution				
							Domestic disappearance		
	Stocks April 1	Production	Imports 1/	Total supply	Exports 1/	Stocks Mar. 31	Reported industrial consumption	Not accounted for 2/	Total
1922....	85	558	2	645	170	72	174	229	403
1923....	72	616	3	691	225	107	134	225	359
1924....	107	586	4	697	250	101	135	211	346
1925....	101	545	6	652	240	81	143	188	331
1926....	81	589	6	676	256	83	112	225	337
1927....	83	737	6	826	330	127	117	252	369
1928....	127	649	7	783	277	121	106	279	385
1929....	121	724	9	854	239	127	112	276	388
1930....	127	685	8	820	327	120	101	272	373
1931....	120	564	4	688	254	141	87	206	293
1932....	141	573	9	723	225	137	62	299	361
1933....	137	622	10	769	300	132	67	270	337
1934....	132	602	11	745	207	191	69	278	347
1935....	191	603	12	806	224	230	88	264	352
1936....	230	635	16	881	270	223	105	283	388
1937....	223	700	15	938	276	219	108	335	443
1938....	219	709	16	944	210	314	93	327	420
1939....	314	605	16	935	238	220	111	366	477
1940....	220	566	17	803	131	210	115	347	462
1941....	210	549	14	773	113	156	146	358	504
1942....	156	560	11	727	43	288	105	291	396
1943....	288	508	18	814	46	296	187	285	472
1944....	296	471	15	782	65	203	190	324	514
1945....	203	488	15	706	92	101	164	349	513
1946....	101	570	16	687	105	98	140	344	484
1947....	98	641	16	755	94	195	141	325	466
1948....	195	659	14	868	117	230	104	417	521
1949....	230	673	14	917	156	206	112	443	555
1950....	206	709	17	932	208	129	153	442	595
1951....	129	684	19	832	111	194	230	297	527
1952....	194	565	20	779	82	229	184	284	468
1953....	229	538	23	790	88	197	206	299	505
1954....	197	618	15	830	116	176	232	306	538

1/ Compiled by the Bureau of the Census.

2/ Consists mainly of turpentine distributed through retailers who are not covered by these surveys.

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FIGURE 3.

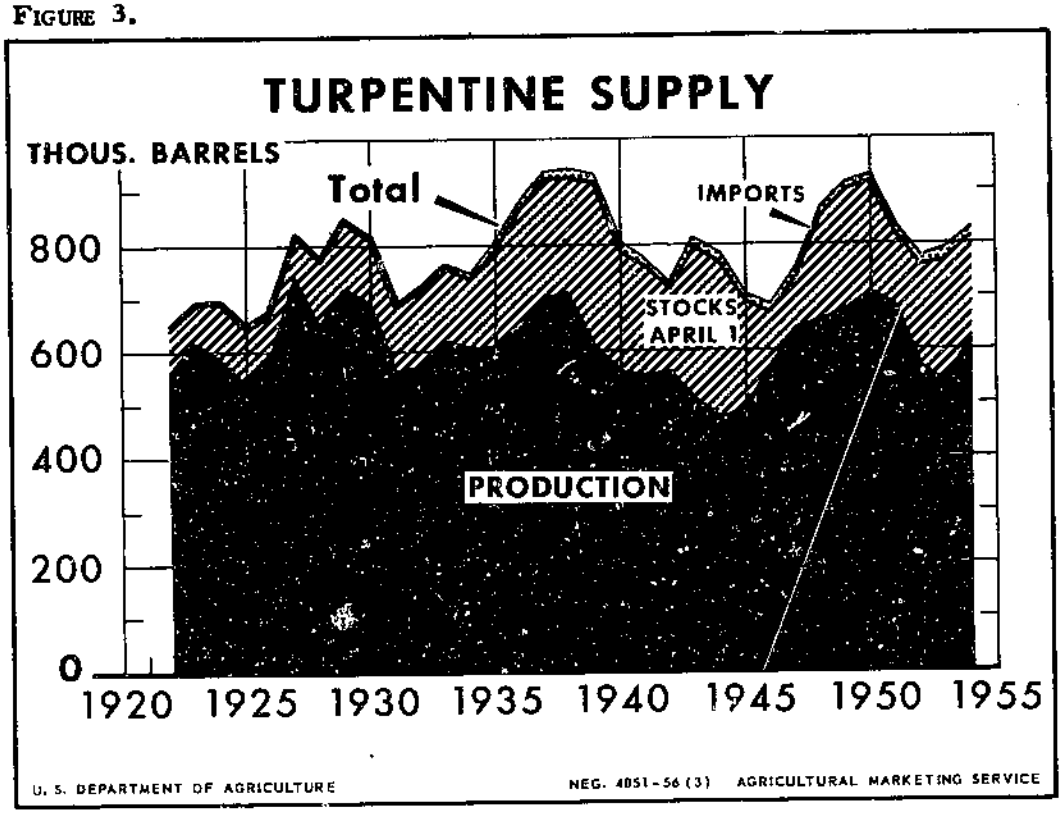

FIGURE 4.

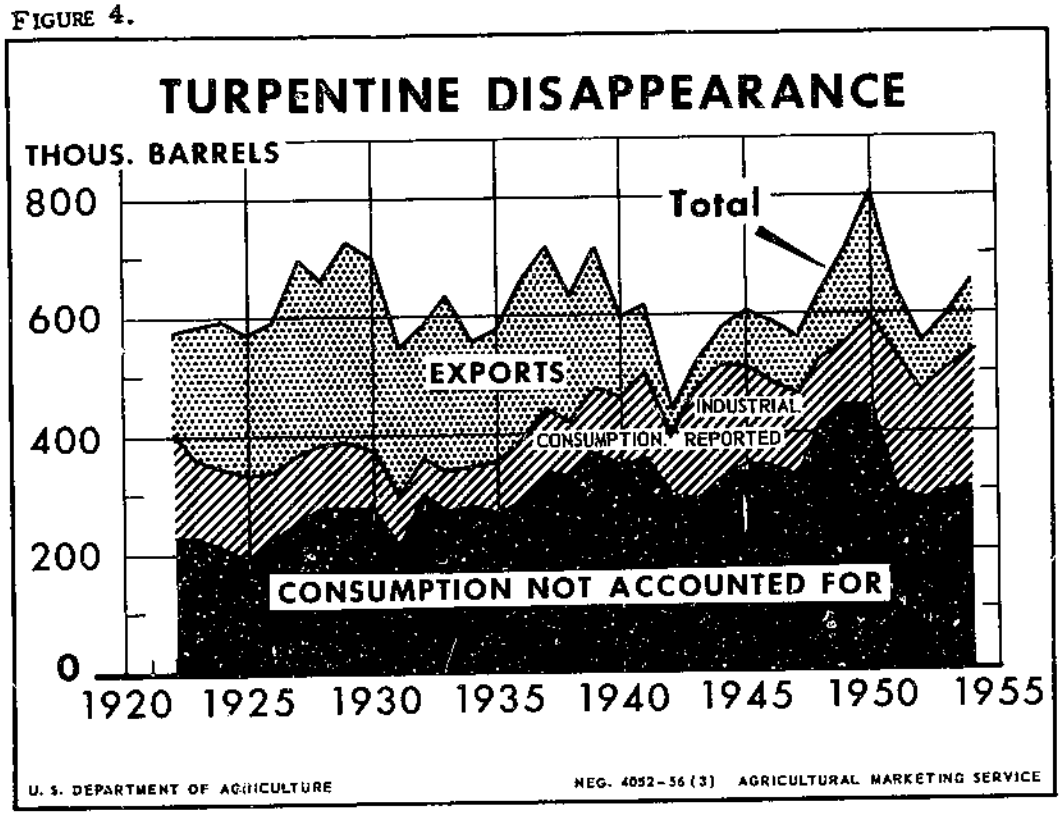

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Table 3.--Gum turpentine: U. S. supply and distribution, annual, 1932-1954
(Thousand barrels of 50 gallons)

Year beginning April 1	Supply				Distribution				
							Domestic disappearance		
	Stocks April 1	Production	Imports 1/	Total supply	Exports 1/	Stocks Mar.31	Reported industrial consumption	Not accounted for 2/	Total
1932	---	501	9	---	213	---	---	---	---
1933	---	526	10	---	281	---	---	---	---
1934	---	510	11	---	190	---	---	---	---
1935	---	497	12	---	205	---	---	---	---
1936	---	483	16	---	238	---	---	---	---
1937	---	518	15	---	233	174	---	---	---
1938	174	534	16	724	175	273	---	---	---
1939	273	383	16	672	189	168	60	255	315
1940	168	344	17	529	103	147	62	217	279
1941	147	285	14	446	79	86	87	194	281
1942	86	322	11	419	22	213	43	141	184
1943	213	288	18	519	27	262	31	199	230
1944	262	245	15	522	50	168	44	260	304
1945	168	244	15	427	67	58	34	268	302
1946	58	270	16	344	64	34	25	221	246
1947	34	294	16	344	57	87	16	184	200
1948	87	324	14	425	71	127	14	213	227
1949	127	323	14	464	100	125	12	227	239
1950	125	272	17	414	138	36	12	228	240
1951	36	246	19	301	67	59	13	162	175
1952	59	217	20	296	43	80	10	163	173
1953	80	178	23	281	35	89	9	148	157
1954	89	176	15	280	50	84	6	140	146

1/ Compiled by the Bureau of the Census.
2/ Consists mainly of turpentine distributed through retailers who are not covered by these surveys.

Table 4.--Wood turpentine: U. S. supply and distribution, annual, 1932-1954
(Thousand barrels of 50 gallons)

Year beginning April 1	Supply				Distribution				
							Domestic disappearance		
	Stocks April 1	Production	Imports 1/	Total supply	Exports 1/	Stocks Mar.31	Reported industrial consumption	Not accounted for 2/	Total
1932	---	72	0	---	12	---	---	---	---
1933	---	96	0	---	19	---	---	---	---
1934	---	92	0	---	17	---	---	---	---
1935	---	106	0	---	19	---	---	---	---
1936	---	152	0	---	32	---	---	---	---
1937	---	182	0	---	43	45	---	---	---
1938	45	175	0	220	35	41	---	---	144
1939	41	222	0	263	49	52	51	111	162
1940	52	222	0	274	28	63	53	130	183
1941	63	264	0	327	34	70	59	164	223
1942	70	238	0	308	21	75	62	150	212
1943	75	220	0	295	19	34	156	86	242
1944	34	226	0	260	15	35	146	64	210
1945	35	244	0	279	25	43	130	81	211
1946	43	300	0	343	41	64	115	123	238
1947	64	347	0	411	37	108	125	141	266
1948	108	335	0	443	46	103	90	204	294
1949	103	350	0	453	56	81	100	216	316
1950	81	437	0	518	70	93	141	214	355
1951	93	438	0	531	44	135	217	135	352
1952	135	348	0	483	39	149	174	121	295
1953	149	360	0	509	53	108	197	151	348
1954	108	442	0	550	66	92	226	166	392

1/ Compiled by the Bureau of the Census.
2/ Consists mainly of turpentine distributed through retailers who are not covered by these surveys.

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Table 5.--Gum rosin: U. S. supply and distribution, annual, 1932-1954
(Thousand drums of 520 pounds net)

Year beginning April 1	Supply				Distribution				
							Domestic disappearance		
	Stocks April 1	Production	Imports 1/	Total supply	Exports 1/	Stocks Mar. 31	Reported industrial consumption	Not accounted for 2/	Total
1932	---	1,363	3/	---	728	---	---	---	---
1933	---	1,431	3/	---	775	---	---	---	---
1934	---	1,387	2	---	657	---	---	---	---
1935	---	1,361	2	---	741	---	---	---	---
1936	---	1,287	2	---	633	---	---	---	---
1937	---	1,388	3/	---	592	612	---	---	---
1938	612	1,467	3/	2,079	401	1,120	---	---	---
1939	1,120	1,054	2	2,176	471	1,128	574	3	577
1940	1,128	939	2	2,069	220	1,323	463	63	526
1941	1,323	791	2	2,116	343	985	776	12	788
1942	985	869	1	1,855	190	1,060	554	51	605
1943	1,060	784	4	1,848	311	648	734	155	889
1944	648	692	17	1,357	160	266	947	-16	931
1945	266	694	10	970	105	238	616	11	627
1946	238	752	3/	990	320	127	539	4	543
1947	127	828	3/	955	296	162	457	40	497
1948	162	921	1	1,084	236	477	352	19	371
1949	477	925	4	1,406	257	802	317	30	347
1950	802	798	4	1,604	595	459	484	66	550
1951	459	716	2	1,177	293	492	370	22	392
1952	492	638	3	1,133	139	682	302	10	312
1953	682	532	1	1,215	132	735	310	38	348
1954	735	528	3/	1,263	209	709	313	32	345

1/ Compiled by the Bureau of the Census
2/ Due to unreported industrial consumption and to failure of some consumers to distinguish in their reports between gum rosin, wood rosin, and modified or derived rosin.
3/ Less than 500 drums.

Table 6.--Wood rosin: U. S. supply and distribution, annual, 1932-1954
(Thousand drums of 520 pounds net)

Year beginning April 1	Supply				Distribution				
							Domestic disappearance		
	Stocks April 1	Production	Imports 1/	Total supply	Exports 1/	Stocks Mar. 31	Reported industrial consumption	Not accounted for 2/	Total
1932	---	296	0	---	143	---	---	---	---
1933	---	407	0	---	187	---	---	---	---
1934	---	396	0	---	189	---	---	---	---
1935	---	460	0	---	223	---	---	---	---
1936	---	579	0	---	250	---	---	---	---
1937	---	643	0	---	235	187	---	---	---
1938	187	610	0	797	256	178	---	---	---
1939	178	760	0	938	310	128	370	130	500
1940	128	778	0	906	204	176	400	126	526
1941	176	917	0	1,093	233	163	535	162	697
1942	163	787	0	950	139	224	575	12	587
1943	224	679	0	903	144	147	579	33	612
1944	147	626	0	773	56	122	594	1	595
1945	122	758	0	880	102	138	603	37	640
1946	138	968	0	1,106	181	96	818	11	829
1947	96	1,163	0	1,259	296	116	876	-29	847
1948	116	1,155	0	1,271	266	141	890	-26	864
1949	141	1,099	0	1,240	305	92	850	- 7	843
1950	92	1,339	0	1,431	346	100	1,020	-35	985
1951	100	1,333	0	1,433	279	231	952	-29	923
1952	231	1,083	0	1,314	218	178	926	- 8	918
1953	178	1,213	0	1,391	384	93	942	-28	914
1954	93	1,342	0	1,435	458	90	943	-56	887

1/ Compiled by the Bureau of the Census.
2/ Due to unreported industrial consumption and to failure of some consumers to distinguish in their reports between gum rosin, wood rosin, and modified or derived rosin.

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Table 7.--Rosin: U. S. supply and distribution, annual, 1922-1954
(Thousand drums of 520 pounds net)

Year beginning April 1	Supply				Distribution				
							Domestic disappearance		
	Stocks April 1	Production	Imports 1/	Total supply	Exports 1/	Stocks Mar. 31	Reported industrial consumption	Not accounted for 2/	Total
1922.....	959	1,542	1	2,502	760	906	604	232	836
1923.....	906	1,695	2	2,603	936	799	722	146	868
1924.....	799	1,610	1	2,410	1,171	517	692	30	722
1925.....	517	1,516	14	2,047	867	355	803	22	825
1926.....	355	1,680	18	2,053	904	397	787	-35	752
1927.....	397	2,093	3	2,493	1,098	487	726	182	908
1928.....	487	1,867	3	2,357	1,023	482	758	94	852
1929.....	482	2,070	2	2,554	1,093	487	884	90	974
1930.....	487	1,972	1	2,460	976	674	727	83	810
1931.....	674	1,613	1	2,288	896	827	634	-69	565
1932.....	827	1,659	3/	2,486	871	678	572	365	937
1933.....	678	1,838	3	2,519	962	743	673	141	814
1934.....	743	1,783	2	2,528	846	783	708	191	899
1935.....	783	1,821	2	2,606	964	613	822	207	1,029
1936.....	613	1,866	2	2,481	883	531	975	92	1,067
1937.....	531	2,031	3/	2,562	827	799	883	53	936
1938.....	799	2,077	3/	2,876	657	1,298	822	99	921
1939.....	1,298	1,814	2	3,114	781	1,256	944	133	1,077
1940.....	1,256	1,717	2	2,975	424	1,499	863	189	1,052
1941.....	1,499	1,708	2	3,209	576	1,148	1,311	174	1,485
1942.....	1,148	1,656	1	2,805	329	1,284	1,129	63	1,192
1943.....	1,284	1,463	4	2,751	455	795	1,313	188	1,501
1944.....	795	1,318	17	2,130	216	388	1,541	-15	1,526
1945.....	388	1,452	10	1,850	207	376	1,219	48	1,267
1946.....	376	1,720	3/	2,096	501	223	1,357	15	1,372
1947.....	223	1,991	3/	2,214	592	278	1,333	11	1,344
1948.....	278	2,076	1	2,355	502	618	1,242	- 7	1,235
1949.....	618	2,024	4	2,646	562	894	1,167	23	1,190
1950.....	894	2,137	4	3,035	941	559	1,504	31	1,535
1951.....	559	2,049	2	2,610	572	723	1,322	- 7	1,315
1952.....	723	1,721	3	2,447	357	860	1,228	2	1,230
1953.....	860	1,745	1	2,606	516	828	1,252	10	1,262
1954.....	828	1,870	3/	2,698	667	799	1,256	-24	1,232

1/ Compiled by the Bureau of the Census.

2/ Due to unreported industrial consumption and to failure of some consumers to distinguish in their reports between gum rosin, wood rosin, and modified or derived rosin.

3/ Less than 500 drums.

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FIGURE 5.

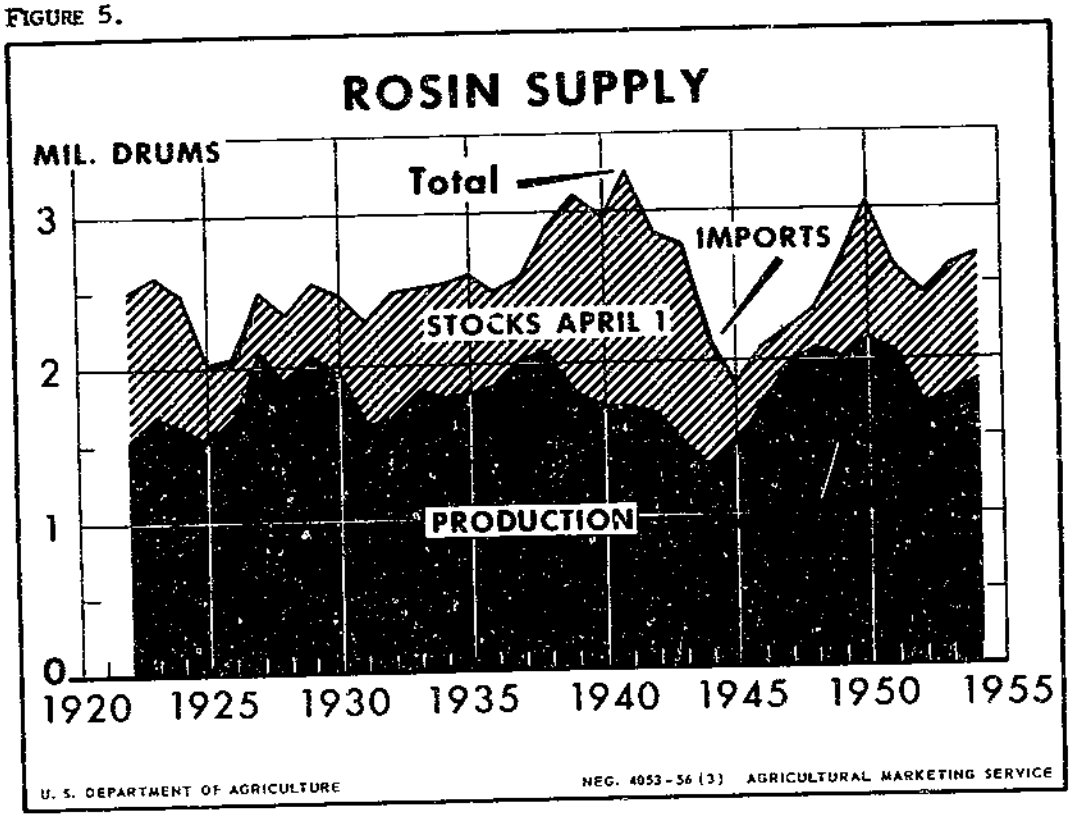

FIGURE 6.

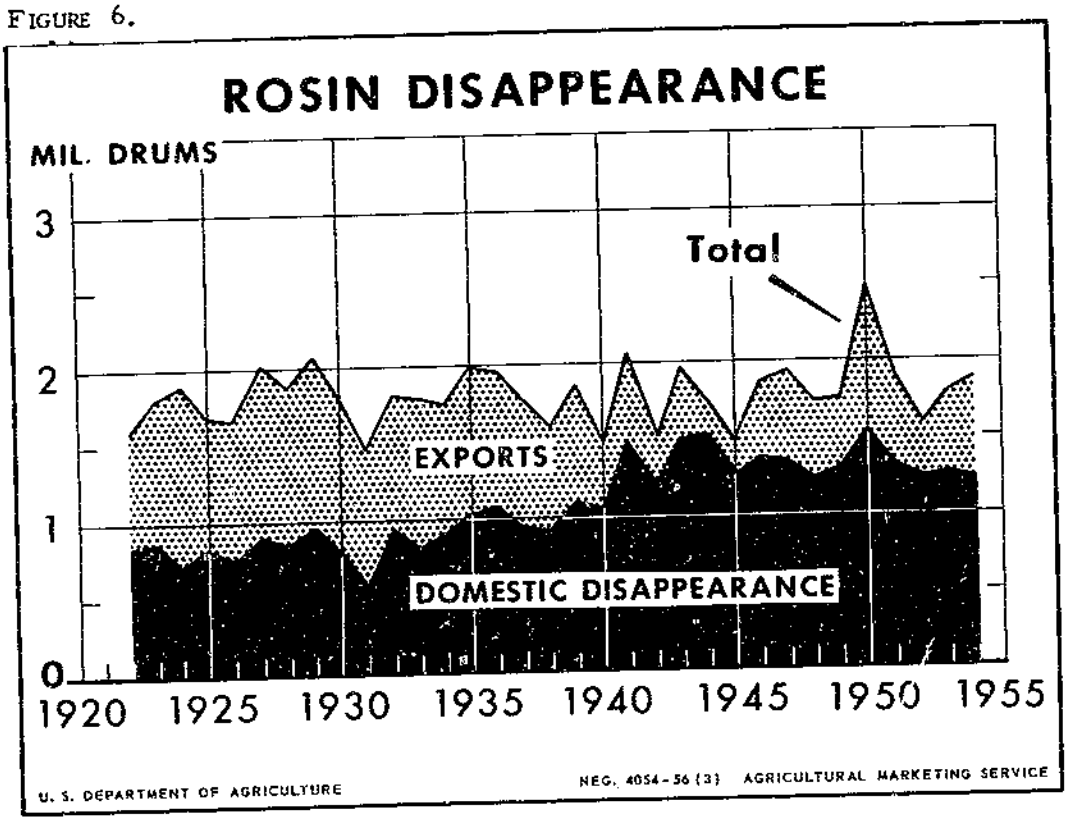

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Table 8.--Turpentine: Annual industrial consumption, by industries, 1922-1954
(Barrels of 50 gallons)

Crop year beginning April 1	Adhesives and plastics	Asphaltic products	Chemicals and pharmaceuticals	Ester gum and synthetic resins	Foundries and foundry supplies	Insecticides and disinfectants	Linoleum and floor covering	Oils and greases	Paint varnish and lacquer
1922.....	1,308	1/	284	---	291	---	69	794	142,351
1923.....	1,404	1/	314	---	402	---	54	1,165	106,092
1924.....	1,026	1/	236	---	387	---	0	2,912	107,304
1925.....	1,221	1/	1,541	---	440	---	83	2,496	114,108
1926.....	1,326	1/	581	---	324	---	110	3,617	88,569
1927.....	1,185	1/	484	---	434	---	65	2,268	94,023
1928.....	1,365	1/	1,105	---	300	---	46	859	86,130
1929.....	1,506	1/	1,209	---	203	---	2	568	92,610
1930.....	1,405	1/	1,404	---	543	---	55	436	81,795
1931.....	847	1/	825	---	126	---	54	1,084	68,898
1932.....	725	1/	650	2/	115	---	51	586	45,604
1933.....	625	1/	748	2/	206	---	2	201	51,365
1934.....	632	1/	802	2/	167	---	6	191	51,725
1935	749	8	1,346	13	326	600	39	225	66,538
1936.....	628	2	3/ 21,583	0	1,085	471	72	45	61,528
1937.....	638	0	31,275	0	759	526	67	45	55,985
1938.....	526	1	22,249	9	576	452	68	37	51,292
1939.....	716	1	36,026	0	659	354	147	24	53,730
1940.....	365	0	40,413	0	847	486	78	84	51,437
1941.....	343	0	55,625	0	1,055	354	52	49	63,849
1942.....	591	0	54,532	358	1,012	192	32	27	28,326
1943.....	467	0	122,368	4/15,176	623	221	33	73	23,690
1944.....	352	0	129,957	4/ 13,914	626	115	41	274	20,745
1945.....	264	0	107,078	4/16,945	616	16	36	72	17,828
1946.....	228	56	91,332	4/14,444	809	15	3	27	17,059
1947	166	499	96,878	4/17,178	882	25	1	25	15,048
1948.....	179	334	63,155	4/16,295	726	17	0	48	13,584
1949.....	149	117	75,623	4/15,720	564	35	0	17	12,141
1950.....	160	277	130,118	61	382	29	0	21	13,293
1951.....	121	1	207,731	65	288	23	0	65	11,351
1952.....	108	0	164,315	43	279	22	0	77	9,777
1953.....	76	0	187,423	0	167	8	0	89	9,262
1954.....	63	0	219,558	0	149	8	0	94	7,977

See footnotes at end of table, page 17.

Continued

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Table 8.--Turpentine: Annual industrial consumption, by industries, 1922-1954--Continued
(Barrels of 50 gallons)

Crop year beginning April 1	Paper and paper size	Printing ink	Railroad and shipyards	Rubber	Shoe polish and shoe material	Soap	Other industries	Total
1922.....	182	273	536	---	19,627	580	8,083	174,378
1923.....	276	189	377	---	16,135	635	7,056	134,099
1924.....	235	257	381	---	16,029	444	5,581	134,792
1925.....	117	218	315	---	16,489	71	6,383	143,482
1926.....	139	251	321	---	10,682	107	6,314	112,341
1927.....	73	301	317	---	11,993	32	5,591	116,766
1928.....	85	203	826	---	11,222	32	3,909	106,082
1929.....	123	285	1,257	---	11,358	84	3,249	112,454
1930.....	35	224	1,310	---	10,557	211	2,929	100,904
1931.....	47	291	925	---	11,101	114	2,561	86,873
1932.....	33	453	684	---	10,986	175	1,464	61,526
1933.....	29	389	511	---	11,516	113	1,683	67,388
1934.....	43	376	718	---	12,678	200	1,767	69,305
1935.....	0	200	3,875	1,114	10,234	125	2,536	87,928
1936.....	0	212	5,102	168	11,267	181	3,066	105,410
1937.....	0	271	4,421	138	10,726	9	2,739	107,599
1938.....	0	489	3,872	125	10,711	213	2,675	93,295
1939.....	0	179	5,071	149	12,505	0	1,701	111,262
1940.....	0	230	6,107	230	12,453	0	1,804	114,534
1941.....	0	237	7,865	182	15,470	0	1,248	146,329
1942.....	0	201	8,772	106	10,322	0	892	105,363
1943.....	0	207	9,928	123	13,806	0	664	187,379
1944.....	0	307	9,977	657	12,620	0	611	190,196
1945.....	0	216	8,518	629	11,336	0	536	164,090
1946.....	0	200	6,390	399	8,652	0	445	140,059
1947.....	0	154	4,910	357	4,143	0	343	140,609
1948.....	0	160	5,314	269	3,507	0	369	103,957
1949.....	0	156	4,438	168	3,039	0	275	112,442
1950.....	0	145	4,952	281	2,798	0	319	152,836
1951.....	0	169	7,259	197	2,214	0	290	229,774
1952.....	0	105	5,957	333	3,020	0	278	184,314
1953.....	0	108	5,323	311	2,526	0	249	205,542
1954.....	0	140	5/	119	1,719	0	2,533	232,360

1/ Included in adhesives and plastics.

2/ Included in paint, varnish and lacquer.

3/ Beginning in 1936 includes turpentine consumed in producers plants in the production of unclassified derived products.

4/ Includes turpentine used in making Beta pinene for consumption in manufacturing synthetic resins; for other years turpentine used for this purpose is included in chemicals and pharmaceuticals.

5/ Consumption by railroads, primarily for maintenance omitted. Shipyards included in other industries.

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Table 9.--Rosin: Annual industrial consumption, by industries, 1922-1954
(Drums of 520 lbs. net)

Crop year beginning April 1	Adhesives and plastics	Asphaltic products	Chemicals and pharmaceuticals	Ester gum and synthetic resins	Foundries and foundry supplies	Insecticides and disinfectants	Linoleum and floor covering	Oils and greases	Paint varnish and lacquer
1922.....	1/26,755	2/	1,366	---	12,599	---	23,391	1/31,373	143,455
1923.....	1/31,702	2/	2,074	---	11,382	---	26,930	1/37,174	173,854
1924.....	35,357	2/	1,494	---	15,658	---	23,592	41,504	175,393
1925.....	37,251	2/	2,390	---	16,598	---	30,198	42,893	182,566
1926.....	41,200	2/	4,161	---	16,842	---	35,486	46,202	175,624
1927.....	30,939	2/	6,770	---	13,526	---	30,069	45,290	183,021
1928.....	27,630	2/	2,967	---	14,846	---	46,563	38,887	196,126
1929.....	32,714	2/	4,266	---	23,479	---	35,849	43,542	227,074
1930.....	21,033	2/	4,197	---	13,919	---	23,566	39,862	154,302
1931.....	11,122	2/	3,150	---	5,754	---	17,397	23,652	124,474
1932.....	9,247	2/	2,422	3/	2,930	---	12,802	17,519	96,992
1933.....	9,215	2/	3,111	3/	1,336	---	15,624	24,507	134,912
1934.....	12,892	2/	2,445	3/	1,908	---	12,683	25,466	140,800
1935.....	21,330	1,446	2,696	79,006	8,974	4,286	19,720	27,476	117,796
1936.....	14,402	1,378	4/94,723	81,513	13,488	3,355	27,820	25,177	112,034
1937.....	14,077	848	95,397	89,450	12,182	3,248	21,986	19,598	109,518
1938.....	9,453	774	98,671	86,889	6,360	3,170	21,850	19,014	104,222
1939.....	14,374	861	130,866	101,629	8,682	4,100	29,807	24,861	126,015
1940.....	13,434	6,987	92,806	101,784	13,392	2,942	31,418	24,086	126,238
1941.....	18,455	3,667	201,001	216,382	21,264	4,535	41,209	32,825	174,198
1942.....	13,756	2,411	207,012	148,263	9,242	4,563	32,745	50,938	131,295
1943.....	20,046	2,394	182,004	146,618	17,476	5,530	14,687	29,921	126,340
1944.....	30,926	2,473	265,022	249,252	14,979	6,032	19,152	42,372	133,136
1945.....	22,656	1,727	272,303	250,835	14,364	5,407	9,602	26,431	101,240
1946.....	20,249	1,622	344,207	269,406	13,197	5,170	20,209	17,493	113,355
1947.....	18,095	1,632	350,103	257,929	10,004	3,338	33,532	13,193	112,890
1948.....	19,995	1,232	345,769	213,096	5,425	2,490	41,410	16,449	110,489
1949.....	20,096	885	329,867	199,862	3,332	2,314	30,994	15,683	93,360
1950.....	23,714	894	5/402,182	319,878	2,747	2,409	38,230	21,457	102,537
1951.....	21,783	593	370,544	243,565	3,016	2,070	31,813	16,649	80,633
1952.....	20,036	853	317,273	260,638	1,946	1,966	30,713	17,021	78,409
1953.....	18,275	1,027	361,935	262,085	1,354	1,679	22,040	14,769	74,398
1954.....	17,236	557	365,912	247,462	643	1,377	14,839	13,024	67,745

See footnotes at end of table, page 19.

Continued

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Table 9.--Rosin: Annual industrial consumption, by industries, 1922-1954--Continued
(Drums of 520 lbs. net)

Crop year beginning April 1	Paper and paper size	Printing ink	Railroad and shipyards	Rubber	Shoe polish and shoe material	Soap	Other industries	Total
1922.....	129,882	1/ 5,123	52	---	794	226,160	2,992	603,942
1923.....	199,085	1/ 6,070	34	---	634	229,404	3,265	721,608
1924.....	220,282	6,790	90	---	167	167,930	3,616	691,873
1925.....	250,692	11,356	61	---	270	224,984	4,184	803,443
1926.....	260,250	11,329	82	---	862	189,211	6,019	787,268
1927.....	237,941	11,642	72	---	724	160,363	5,204	725,561
1928.....	267,154	11,852	83	---	508	146,030	5,264	757,910
1929.....	310,648	12,215	632	---	575	182,879	9,944	883,817
1930.....	273,062	10,483	2,469	---	488	175,174	8,183	726,738
1931.....	239,947	12,131	59	---	470	191,895	4,325	634,376
1932.....	208,800	8,180	86	---	232	209,080	3,436	571,726
1933.....	256,752	9,342	31	---	680	211,338	6,169	673,017
1934.....	269,600	9,498	48	---	904	226,772	4,852	707,868
1935.....	285,714	12,090	194	2,035	7,897	223,000	8,405	822,065
1936.....	328,620	12,749	167	2,341	6,997	237,658	12,544	974,966
1937.....	272,160	10,210	232	2,178	6,541	218,256	7,036	882,917
1938.....	254,689	9,251	1,092	3,135	8,542	187,942	7,339	822,393
1939.....	284,498	10,705	858	3,922	7,382	188,011	7,516	944,087
1940.....	262,350	12,402	2,178	5,242	6,850	153,013	7,863	862,985
1941.....	355,155	12,923	5,128	5,661	9,721	201,094	7,704	1,310,922
1942.....	293,617	15,374	5,458	5,282	7,607	190,926	10,377	1,128,866
1943.....	382,368	16,618	11,896	11,383	9,852	327,058	8,469	1,312,660
1944.....	379,383	12,680	24,855	22,529	7,235	324,164	7,176	1,541,366
1945.....	274,022	7,435	17,747	21,234	5,604	182,683	5,944	1,219,234
1946.....	341,772	9,392	8,827	26,288	5,362	152,808	7,588	1,356,945
1947.....	347,162	7,530	4,653	17,741	5,166	144,090	5,681	1,332,739
1948.....	354,941	6,326	6,499	15,248	4,144	94,293	4,513	1,242,319
1949.....	365,740	5,492	7,980	9,611	4,382	74,041	3,778	1,167,417
1950.....	5/457,922	6,357	7,042	16,308	5,011	92,835	4,222	1,503,745
1951.....	443,083	5,442	12,484	24,182	4,871	57,893	3,271	1,321,892
1952.....	398,052	6,520	6,663	34,910	4,128	46,462	2,890	1,228,480
1953.....	399,521	7,730	3,467	40,458	2,938	37,479	2,797	1,251,952
1954.....	438,615	8,395	6/	36,061	2,718	36,909	4,447	1,255,940

1/The breakdown between adhesives and plastics, oils and greases, and printing ink is an approximation.

2/ Included in adhesives and plastics.

3/ Included in paint, varnish and lacquer.

4/ Beginning in 1936, includes turpentine consumed in producers plants in the production of unclassified derived products.

5/ Prior to Oct. 1, 1950, all "B wood resin" included in chemicals and pharmaceuticals; after that date "B wood resin" used in making paper size is included in paper and paper size.

6/ Consumption by railroads, primarily for maintenance, is omitted. Shipyards included in other industries.

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FIGURE 7.

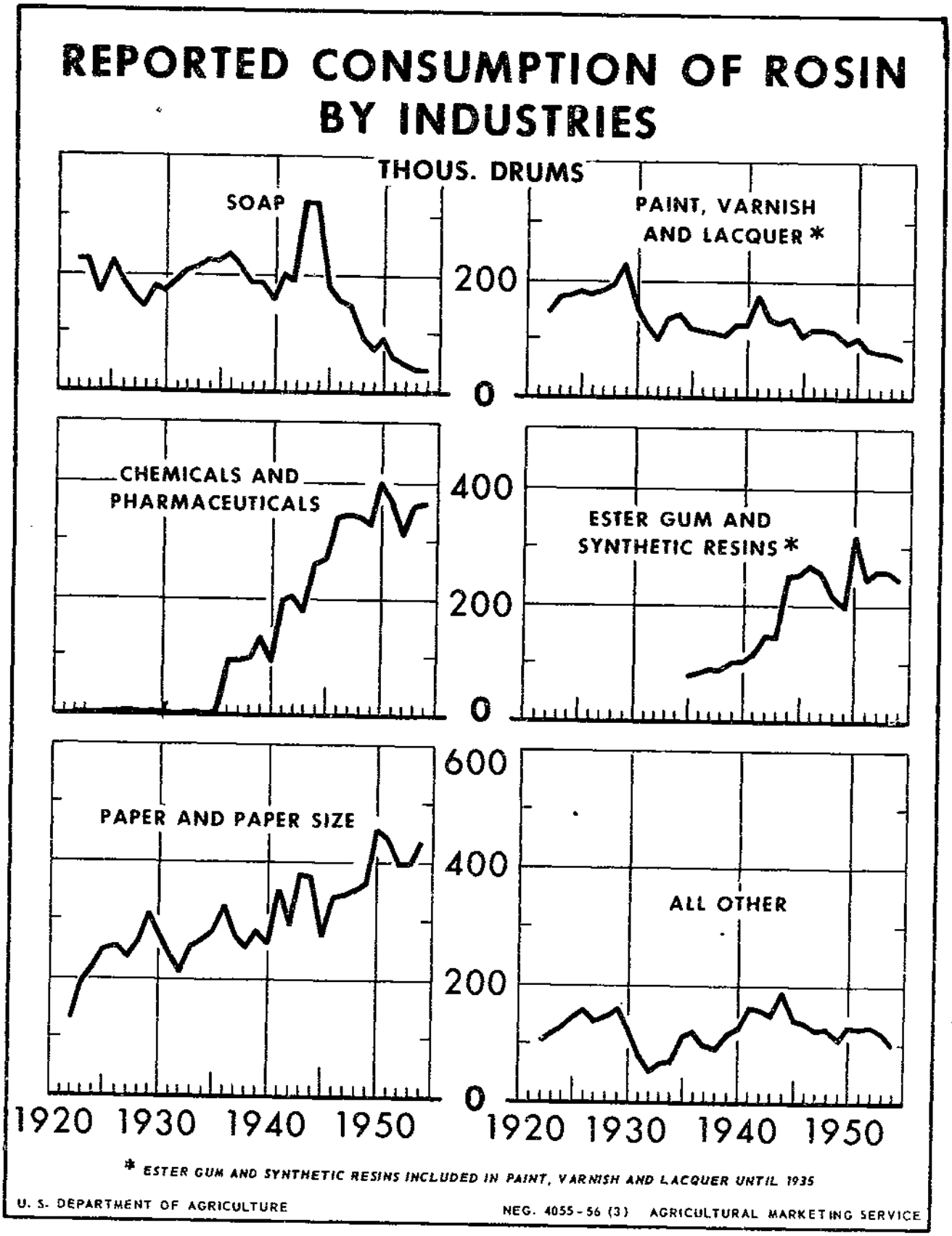

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Table 10.--Miscellaneous naval stores: U. S. production and stocks, annual, 1942-1954
(Barrels of 50 gallons)

Year beginning April 1	Dipentene	Pine oil	Pine tar	Other monocyclic hydrocarbons	Rosin oil
Production:					
1942	24,550	120,000	104,920	35,940	---
1943	18,410	106,340	95,770	34,900	---
1944	18,640	103,490	84,770	33,720	24,960
1945	19,400	110,070	81,990	33,710	18,080
1946	27,320	130,980	101,000	40,120	18,090
1947	26,980	151,040	107,660	37,640	13,290
1948	26,170	148,670	107,250	39,470	18,620
1949	29,710	141,260	97,970	44,030	21,500
1950	44,630	173,170	119,020	50,530	30,910
1951	39,030	174,510	125,830	58,980	24,000
1952	35,890	145,800	96,210	47,230	25,980
1953	31,650	169,850	102,180	70,710	21,560
1954	32,010	189,310	90,530	76,210	20,000
Stocks end of year 1/:					
1942	18,460	18,830	2,550	10,660	---
1943	4,100	7,190	810	4,820	---
1944	3,190	10,300	1,530	5,020	2,910
1945	3,160	12,020	1,780	6,320	2,970
1946	4,020	12,810	1,700	9,840	2,260
1947	8,250	37,000	1,760	18,640	2,160
1948	5,490	37,280	6,480	27,260	2,510
1949	2,590	15,520	8,370	32,460	2,690
1950	2,220	12,560	2,150	20,020	3,990
1951	2,940	17,520	9,870	21,200	3,960
1952	2,500	12,090	9,110	10,310	3,880
1953	7,090	13,820	9,860	28,090	4,880
1954	8,210	19,560	2,200	34,560	3,460

1/ Includes consigned stocks.

Table 11.--Turpentine cups: Number sold for crop years, 1923-1955

Year beginning April 1	Number	Year beginning April 1	Number	Year beginning April 1	Number
	Thousands		Thousands		Thousands
1923	24,828	1935	6,219	1945	6,084
1924	13,249	1936	17,530	1946	6,376
1925	10,059	1937	17,205	1947	7,093
1926	20,500	1938	10,525	1948	7,802
1927	32,310	1939	1,638	1949	3,989
1928	12,589				
1929	24,489	1940	7,568	1950	3,939
1930	11,179	1941	2,744	1951	4,106
1931	1,085	1942	8,648	1952	2,156
1932	3,620	1943	4,253	1953	691
1933	11,088	1944	4,649	1954	604
1934	11,708			1955	1,077

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Table 12.--Price and value of gum naval stores, annual, 1900-1954

Year begining April 1	Season average price 1/		Market value of gum naval stores			
	Bulk gum spirits of turpentine	Gum rosin 2/	Per unit 3/	Turpentine	Rosin	Turpentine and rosin
	Dollars per gallon	Dollars per 100 lb. net	Dollars	Thousand dollars	Thousand dollars	Thousand dollars
1900.....	.359	---	---	11,129	---	---
1901.....	.283	.61	22.69	8,490	5,075	13,565
1902.....	.414	.74	31.06	12,027	5,957	17,984
1903.....	.454	1.05	37.40	12,372	7,928	20,300
1904.....	.465	1.30	41.45	13,950	10,816	24,766
1905.....	.570	1.83	54.12	16,815	14,950	31,765
1906.....	.556	1.96	55.24	16,346	15,961	32,307
1907.....	.490	1.93	51.52	14,332	18,306	32,638
1908.....	.331	1.46	36.99	12,412	15,184	27,596
1909.....	.423	2.24	52.51	12,690	18,637	31,327
1910.....	.617	2.61	67.39	18,973	22,231	41,204
1911.....	.481	2.97	65.63	15,873	27,151	43,024
1912.....	.359	3.00	59.95	12,834	29,718	42,552
1913.....	.327	1.96	43.79	11,036	18,325	29,361
1914.....	.388	1.83	45.02	10,864	14,198	25,062
1915.....	.370	1.76	43.14	9,805	12,923	22,728
1916.....	.370	2.54	54.06	11,285	21,476	32,761
1917.....	.358	2.58	54.02	8,485	16,757	25,242
1918.....	.508	4.92	94.28	8,643	23,256	31,899
1919.....	1.212	7.49	165.46	22,240	38,792	61,032
1920.....	1.393	6.07	154.63	34,059	40,623	74,682
1921.....	.566	1.83	53.92	13,759	12,590	26,349
1922.....	1.138	2.26	88.54	29,588	16,559	46,147
1923.....	.892	2.03	73.02	25,199	16,182	41,381
1924.....	.753	2.44	71.81	19,632	17,814	37,446
1925.....	.907	4.83	112.97	21,697	32,349	54,046
1926.....	.766	5.30	112.50	19,533	38,226	57,759
1927.....	.454	3.63	73.52	14,755	33,316	48,071
1928.....	.445	3.60	72.65	12,460	28,492	40,952
1929.....	.423	3.28	67.07	13,219	28,927	42,146

See footnotes at end of table, page 23.

Continued

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Table 12.--Price and value of gum naval stores, annual, 1900-1954--Continued

Year beginning April 1	Season average price 1/		Market value of gum naval stores			
	Bulk gum spirits of turpentine	Gum rosin 2/	Per unit 3/	Turpentine	Rosin	Turpentine and rosin
	Dollars per gallon	Dollars per 100 lb. net	Dollars	Thousand dollars	Thousand dollars	Thousand dollars
1930.....	.333	2.18	47.17	9,970	18,376	28,346
1931.....	.341	1.69	40.71	8,525	11,925	20,450
1932.....	.328	1.23	33.62	8,216	8,716	16,932
1933.....	.367	1.69	42.01	9,652	12,571	22,223
1934.....	.396	1.98	47.52	10,098	14,283	24,381
1935.....	.376	1.97	46.38	9,344	13,942	23,286
1936.....	.315	2.79	54.81	7,604	18,662	26,266
1937.....	.254	3.20	57.50	6,584	23,102	29,686
1938.....	.166	2.18	38.82	4,435	16,622	21,057
1939.....	.193	2.37	42.83	3,694	12,992	16,686
1940.....	.240	1.98	39.72	4,127	9,667	13,794
1941.....	.527	2.42	60.23	7,511	9,963	17,474
1942.....	.591	3.22	74.63	9,513	14,545	24,058
1943.....	.679	3.97	89.53	9,791	16,176	25,967
1944.....	.779	5.61	117.49	9,550	20,193	29,743
1945.....	.791	6.50	130.55	9,660	23,473	33,133
1946.....	.967	7.43	152.37	13,068	29,075	42,143
1947.....	.627	7.83	140.97	9,218	33,718	42,936
1948.....	.428	7.39	124.86	6,941	35,401	42,342
1949.....	.384	6.47	109.78	6,202	31,117	37,319
1950.....	.551	6.31	115.89	7,490	26,172	33,662
1951.....	.763	8.73	160.37	9,402	32,332	41,734
1952.....	.534	7.53	132.12	5,804	24,851	30,655
1953.....	.516	7.72	133.88	4,584	21,218	25,802
1954.....	.519	7.91	136.69	4,566	21,580	26,146

1/ Based on weighted Savannah Exchange price through 1950; thereafter on Market News Service. Six cents subtracted from turpentine prices as quoted in 1921-40 to eliminate cost of package.

2/ Basis K grade 1901-20; all grades thereafter.

3/ Unit consists of 50 gallons turpentine and 1400 pounds rosin.

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Table 13.--Percent of still output of gum turpentine, by States, 1922-1954

Year beginning April 1	North and South Carolina	Georgia	Florida	Alabama	Mississippi	Louisiana and Texas	Other States	United States
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
1922.....	1.2	28.9	34.0	11.6	1/	1/	24.3	100.0
1923.....	1.6	37.0	35.9	7.7	1/	1/	17.8	100.0
1924.....	1.7	38.7	35.1	7.0	1/	1/	17.5	100.0
1925.....	2.1	41.3	37.9	6.5	1/	1/	12.2	100.0
1926.....	2.9	42.8	36.9	6.3	1/	1/	11.1	100.0
1927.....	3.8	46.3	32.2	6.9	1/	1/	10.8	100.0
1928.....	4.1	45.9	32.2	7.1	1/	1/	10.7	100.0
1929.....	4.0	50.9	31.4	6.4	1/	1/	7.3	100.0
1930.....	4.5	51.7	30.6	5.7	1/	1/	7.5	100.0
1931.....	4.2	51.0	34.2	5.0	1/	1/	5.6	100.0
1932.....	3.3	53.6	29.2	8.4	2.3	3.2	---	100.0
1933.....	3.6	52.0	30.8	8.7	2.2	2.7	---	100.0
1934.....	3.7	56.6	27.0	8.7	1.8	2.2	---	100.0
1935.....	3.6	55.4	28.4	9.2	2.0	1.4	---	100.0
1936.....	3.1	57.3	25.8	10.6	2.3	.9	---	100.0
1937.....	3.1	57.0	26.4	9.6	3.1	.8	---	100.0
1938.....	2.7	57.2	27.9	8.4	3.1	.7	---	100.0
1939.....	2.3	59.4	27.0	7.5	3.0	.8	---	100.0
1940.....	1.8	63.4	25.2	6.8	2.3	.5	---	100.0
1941.....	1.3	66.5	23.6	6.2	1.8	.6	---	100.0
1942.....	1.2	69.4	21.5	6.2	1.4	.3	---	100.0
1943.....	1.1	68.9	22.7	5.8	1.2	.3	---	100.0
1944.....	.9	68.3	23.5	5.7	1.3	.3	---	100.0
1945.....	.7	74.0	18.0	5.6	1.3	.4	---	100.0
1946.....	.4	72.9	21.4	4.0	1.0	.3	---	100.0
1947.....	.3	69.8	22.4	6.9	.2	.4	---	100.0
1948.....	1/	74.4	18.3	6.7	1/	1/	.6	100.0
1949.....	1/	74.9	18.3	6.1	1/	1/	.7	100.0
1950.....	1/	76.3	17.3	6.0	1/	1/	.4	100.0
1951.....	1/	77.1	16.8	5.4	1/	.0	.7	100.0
1952.....	1/	76.4	17.2	5.8	1/	.0	[illegible]	100.0
1953.....	1/	77.4	16.5	1/	1/	.0	6.[illegible]	100.0
1954.....	1/	79.8	13.9	1/	1/	.0	6.3	100.0

1/ Included in other States.

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FIGURE 8.

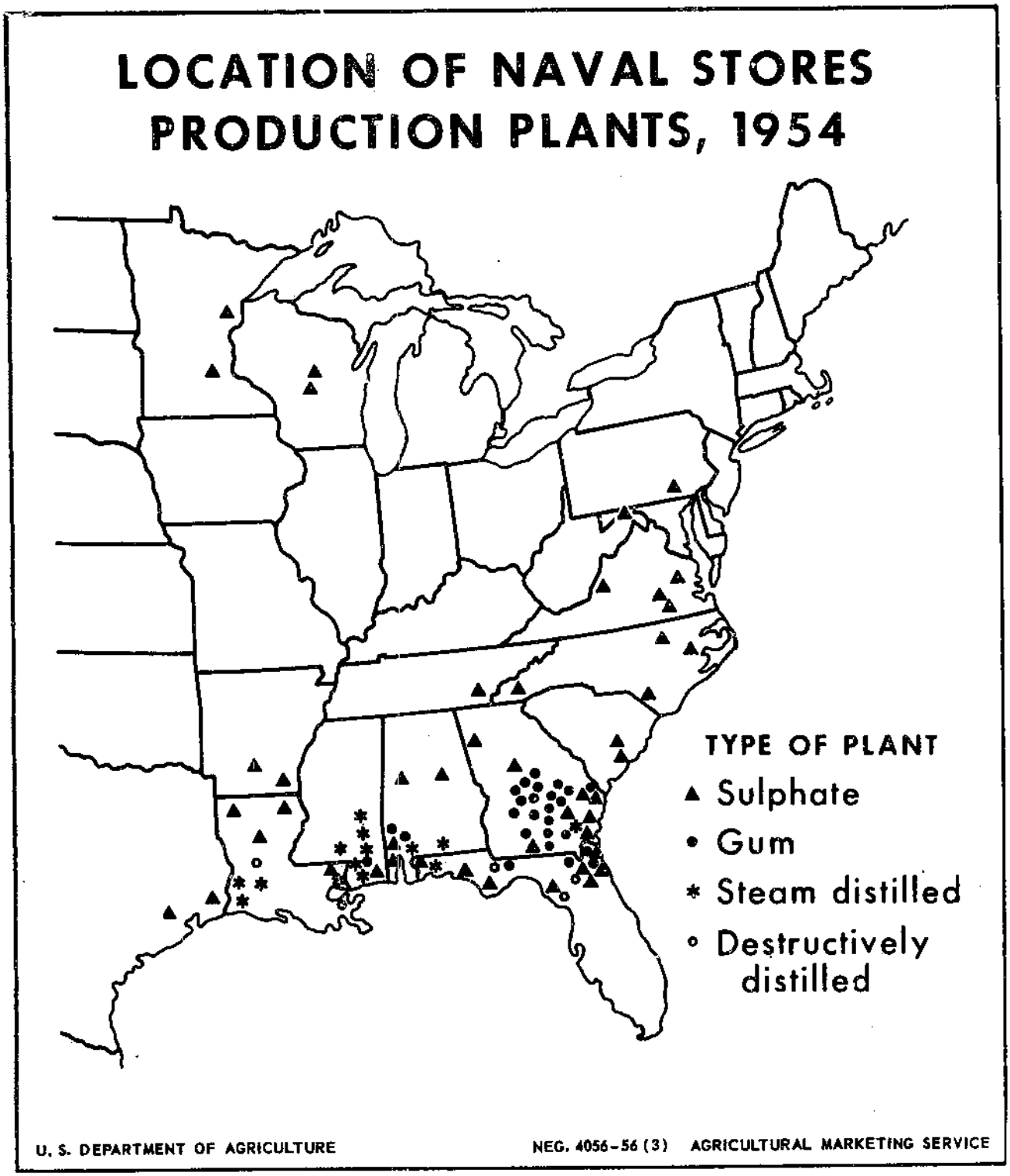

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Table 14.--Turpentine production, by months, 1948-1954
(Barrels of 50 gallons)

Crop year and month	Gum at central stills	Wood				Total gum and wood
		Steam distilled	Destructively distilled	Sulphate	Total	
1948:						
April	22,300	17,200	140	9,930	27,270	49,570
May	31,180	16,820	170	9,990	26,980	58,160
June	40,220	16,490	240	8,260	24,990	65,210
July	38,690	15,210	260	8,950	24,420	63,110
August	33,110	19,250	210	9,530	28,990	62,100
September	32,510	17,640	260	9,720	27,620	60,130
October	24,860	18,010	220	12,050	30,280	55,140
November	23,570	17,560	230	12,240	30,030	53,600
December	18,230	17,580	320	10,630	28,530	46,760
January	7,690	17,330	210	11,900	29,440	37,130
February	7,350	16,550	230	10,080	26,860	34,210
March	12,750	17,520	290	11,590	29,400	42,150
Crop year	292,460	207,160	2,780	124,870	334,810	627,270
1949:						
April	22,120	16,710	330	10,850	27,890	50,010
May	33,270	15,800	290	10,460	26,550	59,820
June	38,840	13,670	180	10,960	24,810	63,650
July	37,020	13,160	110	9,690	22,960	59,980
August	36,150	15,580	130	12,110	27,820	63,970
September	30,920	16,490	500	11,270	28,260	59,180
October	25,800	17,070	310	12,780	30,160	55,960
November	23,100	18,050	340	12,870	31,260	54,360
December	21,280	18,480	230	12,950	31,660	52,940
January	5,790	18,570	290	14,840	33,700	39,490
February	8,120	17,800	140	14,310	32,250	40,370
March	11,340	18,250	300	14,410	32,960	44,300
Crop year	293,750	199,630	3,150	147,500	350,280	644,030
1950:						
April	20,040	19,710	370	15,090	35,170	55,210
May	35,740	19,150	660	15,200	35,010	70,750
June	37,430	17,250	410	14,600	32,260	69,690
July	32,190	17,650	370	13,870	31,890	64,080
August	32,900	19,120	140	14,250	33,510	66,410
September	24,620	19,680	650	14,130	34,460	59,080
October	19,670	19,930	780	17,390	38,100	57,770
November	19,480	20,350	340	17,660	38,350	57,830
December	13,520	21,540	410	16,660	38,610	52,130
January	9,130	21,080	510	18,560	40,150	49,280
February	4,890	20,660	400	17,250	38,310	43,200
March	7,170	20,960	370	19,520	40,850	48,020
Crop year	256,780	237,080	5,410	194,180	436,670	693,450
1951:						
April	14,430	21,000	500	19,230	40,730	55,160
May	30,330	20,430	570	14,030	35,030	65,360
June	34,320	18,570	420	15,820	34,810	69,130
July	32,450	18,610	410	16,350	35,370	67,820
August	31,040	17,880	60	17,350	35,290	66,330
September	23,280	17,490	380	16,090	33,960	57,240
October	19,810	20,210	250	19,910	40,370	60,180
November	16,440	19,140	540	19,720	39,400	55,840
December	13,630	17,760	380	17,200	35,340	48,970
January	8,360	19,460	400	16,770	36,630	44,990
February	5,150	19,610	230	14,400	34,240	39,390
March	6,490	19,430	340	16,560	36,330	42,820
Crop year	235,730	229,590	4,480	203,430	437,500	673,230

Continued

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Table 14.--Turpentine production, by months, 1948-1954--Continued
(Barrels of 50 gallons)

Crop year and month	Gum at central stills	Wood				Total gum and wood
		Steam distilled	Destructively distilled	Sulphate	Total	
1952:						
April	16,970	18,370	340	17,210	35,920	52,890
May	26,740	16,220	270	16,920	33,410	60,150
June	28,770	12,530	220	16,570	29,320	58,090
July	31,800	11,320	100	13,050	24,470	56,270
August	25,620	12,900	290	12,780	25,970	51,590
September	21,200	12,840	200	13,930	26,970	48,170
October	17,690	14,620	360	14,720	29,700	47,390
November	15,160	14,230	120	15,050	29,400	44,560
December	12,830	14,770	290	12,380	27,440	40,270
January	5,270	16,900	270	12,780	29,950	35,220
February	3,590	14,050	160	13,000	27,210	30,800
March	6,470	16,340	310	11,170	27,820	34,290
Crop year	212,110	175,090	2,930	169,560	347,580	559,690
1953:						
April	13,220	16,800	200	12,810	29,810	43,030
May	20,760	15,920	170	14,370	30,460	51,220
June	26,230	13,790	370	13,890	28,050	54,280
July	24,290	14,370	200	11,690	26,260	50,550
August	21,060	15,200	180	13,610	28,990	50,050
September	17,670	15,740	300	13,320	29,360	47,030
October	14,950	17,090	230	14,880	32,200	47,150
November	12,990	16,260	190	13,540	29,990	42,980
December	10,500	16,490	300	11,310	28,100	38,600
January	5,760	18,300	280	13,960	32,540	38,300
February	4,320	16,670	180	14,390	31,240	35,560
March	4,480	16,460	260	16,450	33,170	37,650
Crop year	176,230	193,090	2,860	164,220	360,170	536,400
1954:						
April	15,910	17,250	110	16,290	33,650	49,560
May	17,780	16,000	180	18,450	34,630	52,410
June	26,100	16,260	210	18,340	34,810	60,910
July	24,820	17,210	160	14,310	31,680	56,500
August	22,550	15,920	210	16,530	32,660	55,210
September	20,020	16,540	140	16,220	32,900	52,920
October	14,670	16,460	130	19,690	36,280	50,950
November	11,610	18,180	280	20,140	38,600	50,210
December	8,080	18,050	180	19,760	37,990	46,070
January	4,960	19,080	360	22,990	42,430	47,390
February	3,780	17,980	250	22,350	40,580	44,360
March	5,120	18,770	200	26,680	45,650	50,770
Crop year	175,400	207,700	2,410	231,750	441,860	617,260

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Table 15.--Turpentine stocks, by months, 1948-1954
(Barrels of 50 gallons)

End of month	Gum			Wood				Total gum and wood
	Controlled by CCC 1/	Other	Total	Steam distilled 2/	Destructively distilled 2/	Sulphate	Total	
1948:								
April	47,260	14,140	61,400	47,480	670	46,880	95,030	156,430
May	59,740	18,560	78,300	43,250	500	44,350	88,100	166,400
June	67,740	12,860	80,600	38,070	370	42,730	81,170	161,770
July	73,400	15,140	88,540	35,810	400	43,380	79,590	168,130
August	82,580	10,820	93,400	33,720	460	38,910	73,090	166,490
September	92,730	17,220	109,950	33,130	370	41,790	75,290	185,240
October	97,280	13,900	111,180	33,690	340	43,880	77,910	189,090
November	99,800	24,560	124,360	36,680	380	47,080	84,140	208,500
December	102,390	28,920	131,310	43,540	360	46,140	90,040	221,350
January	103,030	19,100	122,130	48,840	410	47,850	97,100	219,230
February	97,970	13,420	111,390	45,810	530	48,220	94,560	205,950
March	89,110	12,620	101,730	47,490	750	52,630	100,870	202,600
1949:								
April	71,260	29,530	100,790	45,930	790	51,630	98,350	199,140
May	71,300	23,790	95,090	41,430	760	50,050	92,240	187,330
June	81,910	19,490	101,400	34,270	740	47,720	82,730	184,130
July	95,470	23,880	119,350	28,640	610	45,900	75,150	194,500
August	106,300	25,660	131,960	26,320	510	41,260	68,090	200,050
September	102,720	26,690	129,410	22,810	940	36,220	59,970	189,380
October	102,610	26,560	129,170	22,110	800	28,650	51,560	180,730
November	101,760	26,930	128,690	26,210	690	27,000	53,900	182,590
December	105,000	26,440	131,440	34,490	810	28,220	63,520	194,960
January	100,570	20,130	120,700	38,130	820	30,770	69,720	190,420
February	95,370	16,520	111,890	36,790	720	31,940	69,450	181,340
March	85,410	10,690	96,100	39,450	550	31,490	71,490	167,590
1950:								
April	75,180	17,620	92,800	43,940	710	34,280	78,930	171,730
May	68,260	21,750	90,010	42,320	1,000	33,740	77,060	167,070
June	51,740	34,030	85,770	37,490	1,090	31,790	70,370	156,140
July	39,580	33,760	73,340	32,580	960	32,550	66,090	139,430
August	18,510	47,700	66,210	26,770	600	31,050	58,420	124,630
September	18,510	40,780	59,290	24,910	610	25,810	51,330	110,620
October	16,490	36,520	53,010	25,580	660	26,430	52,670	105,680
November	16,490	35,980	52,470	28,610	580	28,840	58,030	110,500
December	16,490	26,960	43,450	38,900	610	31,140	70,650	114,100
January	12,410	15,350	27,760	40,230	580	32,920	73,730	101,490
February	10,000	7,850	17,850	46,300	640	33,300	80,240	98,090
March	10,000	5,180	15,180	43,860	580	34,680	79,120	94,300
1951:								
April	10,000	7,530	17,530	51,210	500	33,020	84,730	102,260
May	10,000	12,730	22,730	54,160	680	31,410	86,250	108,980
June	10,000	24,360	34,360	51,220	750	34,570	86,540	120,900
July	10,550	25,790	36,340	51,940	920	34,170	87,030	123,370
August	13,890	33,520	47,410	49,850	450	33,500	83,800	131,210
September	13,960	41,630	55,590	48,240	610	38,080	86,930	142,520
October	10,530	36,890	47,420	49,590	470	38,220	88,280	135,700
November	10,420	32,140	42,560	55,080	710	43,870	99,660	142,220
December	10,520	34,100	44,620	60,730	830	43,900	105,460	150,080
January	10,500	32,560	43,060	68,880	800	48,430	118,110	161,170
February	10,500	27,410	37,910	72,580	590	55,070	128,240	166,150
March	10,650	21,300	31,950	76,010	630	48,260	124,900	156,850

See footnotes at end of table, page 29.

Continued

UPDATA 1981

Table 15.--Turpentine stocks, by months, 1948-1954--Continued
(Barrels of 50 gallons)

End of month	Gum			Wood				Total gum and wood
	Controlled by CCC 1/	Other	Total	Steam distilled 2/	Destructively distilled 2/	Sulphate	Total	
1952:								
April	13,760	17,870	31,630	73,260	630	47,810	121,700	153,330
May	19,540	18,400	37,940	71,780	470	50,210	122,460	160,400
June	24,620	23,220	47,840	66,660	520	48,690	115,870	163,710
July	31,290	29,940	61,230	68,990	390	44,180	113,560	174,790
August	37,700	21,970	59,670	69,000	330	46,220	115,550	175,220
September	44,110	18,030	62,140	70,000	350	48,280	118,630	180,770
October	46,130	17,870	64,000	71,280	470	49,550	121,300	185,300
November	47,570	20,890	68,460	76,020	360	52,290	128,670	197,130
December	51,720	20,770	72,490	82,230	330	55,540	138,100	210,590
January	51,220	16,380	67,600	83,670	350	58,810	143,830	211,430
February	49,790	12,340	62,130	84,110	370	56,960	141,440	203,570
March	44,540	9,250	53,790	83,030	580	54,220	137,830	191,620
1953:								
April	43,800	9,740	53,540	75,640	630	50,960	127,230	180,770
May	44,150	15,880	60,030	73,960	380	50,780	125,120	185,150
June	47,830	19,000	66,830	71,340	520	45,090	116,950	183,780
July	56,880	17,940	74,820	67,840	530	37,790	106,160	180,980
August	64,250	17,090	81,340	66,640	450	31,280	98,370	179,710
September	67,990	14,550	82,540	64,010	560	31,880	96,450	178,990
October	69,670	13,510	83,180	64,300	600	36,330	101,230	184,410
November	66,440	16,740	83,180	62,920	500	38,030	101,450	184,630
December	67,020	17,380	84,400	66,590	610	32,090	99,290	183,690
January	67,400	11,300	78,700	68,660	660	32,240	101,560	180,260
February	62,620	11,160	73,780	66,830	470	35,080	102,380	176,160
March	57,210	9,340	66,550	62,980	420	32,990	96,390	162,940
1954:								
April	57,620	11,260	68,880	62,550	300	33,690	96,540	165,420
May	57,620	12,350	69,970	59,080	280	24,930	84,290	154,260
June	57,620	19,320	76,940	54,050	360	23,040	77,450	154,390
July	60,300	20,220	80,520	50,220	340	21,040	71,600	152,120
August	65,940	17,330	83,270	43,770	310	17,230	61,310	144,580
September	68,210	19,750	87,960	44,640	350	14,220	59,210	147,170
October	68,020	20,500	88,520	45,690	350	18,880	64,920	153,440
November	68,290	20,320	88,610	49,380	380	18,460	68,220	156,830
December	57,470	23,610	81,080	49,830	400	20,370	70,600	151,680
January	57,470	18,590	76,060	53,380	560	20,310	74,250	150,310
February	55,830	15,420	71,250	55,340	620	22,900	78,860	150,110
March	53,540	9,650	63,190	56,960	630	22,920	80,510	143,700

Stocks at larger producing centers and at yards and concentration points in the South, regardless of ownership; not necessarily stocks available for sale.

1/ All processed stocks controlled by the Commodity Credit Corporation.

2/ Includes consigned stocks.

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Table 16.--Rosin production and stocks, by months, 1948-1954
(Drums of 520 pounds net)

Crop year and month	Production			Stocks end of month 1/				
	Gum at central stills	Wood steam distilled	Total gum and wood	Gum			Wood-steam distilled 3/	Total gum and wood
				Controlled by CCC 2/	Other	Total		
1948:								
April	59,120	94,900	154,020	0	78,100	78,100	73,400	151,500
May	81,440	97,400	178,840	13,780	92,020	105,800	83,500	189,300
June	104,150	102,200	206,350	59,740	104,130	163,870	91,620	255,490
July	102,020	91,360	193,380	135,250	72,230	207,480	93,470	300,950
August	90,280	105,960	196,240	199,910	68,300	268,210	91,360	359,570
September	87,280	97,180	184,460	264,240	62,950	327,190	104,330	431,520
October	69,960	95,510	165,470	305,990	68,560	374,550	102,340	476,890
November	83,370	101,790	185,160	346,470	50,220	396,690	109,860	506,550
December	67,630	94,610	162,240	397,540	45,770	443,310	111,560	554,870
January	26,780	96,140	122,920	406,410	34,580	440,990	122,440	563,430
February	21,480	90,560	112,040	405,540	25,810	431,350	121,860	553,210
March	34,650	87,280	121,930	405,540	28,310	433,850	114,360	548,210
Crop year	828,160	1,154,890	1,983,050	---	---	---	---	---
1949:								
April	56,900	89,560	146,460	405,540	51,690	457,230	117,950	575,180
May	85,360	85,770	171,130	416,360	72,980	489,340	118,530	607,870
June	101,130	81,450	182,580	482,180	52,660	534,840	115,680	650,520
July	98,230	78,780	177,010	538,960	62,500	601,460	110,130	711,590
August	99,050	90,860	189,910	597,460	46,470	643,930	102,350	746,280
September	86,180	92,380	178,560	624,530	43,360	667,890	94,560	762,450
October	74,440	91,770	166,210	638,550	46,600	685,150	85,240	770,390
November	85,020	99,200	184,220	665,420	62,660	728,080	74,860	802,940
December	79,740	98,360	178,100	734,080	36,760	770,840	74,030	844,870
January	19,500	99,260	118,760	752,320	15,880	768,200	77,650	845,850
February	23,530	94,750	118,280	749,750	15,390	765,140	79,940	845,080
March	32,390	96,470	128,860	748,270	9,230	757,500	74,460	831,960
Crop year	841,470	1,098,610	1,940,080	---	---	---	---	---
1950:								
April	51,980	103,360	155,340	746,470	19,140	765,610	65,330	830,940
May	91,410	106,760	198,170	746,350	38,770	785,120	65,830	850,950
June	98,880	100,210	199,090	743,420	68,450	811,870	55,790	867,660
July	89,410	103,810	193,220	728,310	77,810	806,120	55,750	861,870
August	91,900	111,180	203,080	645,800	126,870	772,670	50,250	822,920
September	69,560	113,600	183,160	475,100	223,270	698,370	43,310	741,680
October	59,350	113,660	173,010	406,960	190,580	597,540	35,620	633,160
November	70,080	116,200	186,280	370,770	183,600	554,370	41,320	595,690
December	53,550	119,030	172,580	365,400	146,900	512,300	41,960	554,260
January	38,330	121,890	160,220	328,290	107,670	435,960	45,870	481,830
February	16,480	112,500	128,980	324,520	64,850	389,370	60,760	450,130
March	24,170	117,210	141,380	311,450	43,840	355,290	64,570	419,860
Crop year	755,100	1,339,410	2,094,510	---	---	---	---	---
1951:								
April	38,300	120,290	158,590	300,590	40,460	341,050	74,940	415,990
May	76,710	120,420	197,130	287,790	67,280	355,070	92,340	447,410
June	89,120	115,390	204,510	278,670	103,220	381,890	95,920	477,810
July	87,260	112,770	200,030	280,870	105,570	386,440	97,500	483,940
August	84,680	107,280	191,960	289,630	115,640	405,270	119,800	525,070
September	66,040	111,520	177,560	297,860	124,170	422,030	129,580	551,610
October	59,470	112,730	172,200	300,390	132,870	433,260	141,210	574,470
November	63,180	114,970	178,150	301,930	151,410	453,340	155,510	608,850
December	52,770	96,400	149,170	313,700	160,860	474,560	166,980	641,540
January	31,720	110,900	142,620	317,990	142,330	460,320	181,490	641,810
February	17,890	108,320	126,210	317,990	128,010	446,000	193,180	639,180
March	18,780	102,050	120,830	321,010	108,190	429,200	210,040	639,240
Crop year	685,920	1,333,040	2,018,960	---	---	---	---	---

See footnotes at end of table, page 31.

Continued

UPDATA 1981

Table 16.--Rosin production and stocks, by months, 1948-1954--Continued
(Drums of 520 pounds net)

Crop year and month	Production			Stocks end of month 1/				
	Gum at central stills	Wood-steam distilled	Total gum and wood	Gum			Wood-steam distilled 3/	Total gum and wood
				Controlled by CCC 2/	Other	Total		
1952:								
April.....	44,660	101,550	146,210	333,460	100,020	433,480	219,370	652,850
May	70,580	98,670	169,250	361,580	110,070	471,650	222,780	694,430
June	76,010	80,850	156,860	398,560	111,940	510,500	219,360	729,860
July	88,010	76,840	164,850	459,000	101,170	560,170	217,540	777,710
August	72,430	81,300	153,730	490,230	103,710	593,940	212,100	806,040
September.	60,690	86,840	147,530	521,820	98,510	620,330	197,680	818,010
October ...	54,960	91,570	146,530	547,880	89,150	637,030	187,190	824,220
November .	57,410	92,620	150,030	576,150	86,500	662,650	182,990	845,640
December..	49,170	94,240	143,410	611,750	69,610	681,360	183,880	865,240
January....	18,680	95,700	114,380	614,390	49,040	663,430	175,580	839,010
February ..	11,940	85,300	97,240	608,870	42,920	651,790	170,200	821,990
March.....	19,110	97,050	116,160	604,470	28,920	633,390	157,420	790,810
Crop year...	623,650	1,082,530	1,706,180	---	---	---	---	---
1953:								
April.....	35,930	101,300	137,230	604,680	28,870	633,550	153,500	787,050
May	55,140	95,990	151,130	613,800	42,880	656,680	140,520	797,200
June	71,320	90,960	162,280	633,180	52,000	685,180	132,280	817,460
July	67,400	92,900	160,300	669,230	42,810	712,040	121,410	833,450
August.....	59,260	98,710	157,970	693,300	42,770	736,070	112,020	848,090
September..	51,100	104,000	155,100	698,130	46,760	744,890	108,980	853,870
October....	45,910	108,220	154,130	694,620	55,030	749,650	105,430	855,080
November..	49,830	107,450	157,280	682,080	74,470	756,550	94,680	851,230
December..	42,570	101,070	143,640	683,700	79,280	762,980	92,310	855,290
January....	20,510	107,770	128,280	679,910	63,590	743,500	83,960	827,460
February ..	13,810	102,440	116,250	677,090	40,910	718,000	79,980	797,980
March.....	14,740	102,530	117,270	672,890	26,410	699,300	75,590	774,890
Crop year...	527,520	1,213,340	1,740,860	---	---	---	---	---
1954:								
April.....	43,270	103,290	146,560	671,200	32,310	703,510	77,960	781,470
May.....	48,480	107,120	155,600	670,980	39,750	710,730	70,670	781,400
June.....	70,720	106,300	177,020	671,930	63,510	735,440	65,510	800,950
July.....	70,630	110,650	181,280	686,280	75,810	762,090	68,400	830,490
August	65,460	109,240	174,700	705,240	75,830	781,070	65,060	846,130
September.	58,180	111,420	169,600	707,820	75,600	783,420	62,450	845,870
October....	48,600	112,130	160,730	696,710	80,680	777,390	58,460	835,850
November..	45,500	114,800	160,300	676,330	95,720	772,050	58,220	830,270
December..	30,980	116,780	147,760	673,630	70,180	743,810	67,820	811,630
January....	17,700	118,260	135,960	672,120	51,240	723,360	73,910	797,270
February...	11,650	115,280	126,930	666,630	31,470	698,100	71,250	769,350
March.....	14,940	117,100	132,040	656,140	19,270	675,410	74,100	749,510
Crop year ...	526,110	1,342,370	1,868,480	---	---	---	---	---

1/ Stocks at larger producing centers and at yards and concentration points in the South, regardless of ownership; not necessarily stocks available for sale.

2/ All processed stocks controlled by the Commodity Credit Corporation.

3/ Includes consigned stocks.

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Table 17.--Crude pine gum commercial price received by producers and parity price, by months, 1951-1954
(Dollars per standard barrel)

Month	Average price delivered at central stills				Mid-month parity price			
	1951	1952	1953	1954	1951	1952	1953	1954
April.....	34.30	24.90	25.00	25.20	28.30	29.50	27.90	28.30
May.....	33.00	24.70	25.30	25.50	28.20	29.50	27.90	28.40
June.....	33.10	25.10	25.00	25.60	28.30	29.20	27.50	28.20
July.....	29.60	25.00	24.80	25.20	28.20	29.20	27.80	28.00
August....	29.50	25.00	25.00	25.30	28.20	29.30	27.80	28.20
September.	30.80	25.30	25.10	25.40	28.20	29.00	27.70	28.00
October...	32.40	24.80	24.60	24.60	28.30	28.80	27.60	27.90
November.	29.10	23.20	23.90	23.80	28.40	28.70	27.70	27.90
December.	25.90	21.90	23.50	23.90	28.40	28.70	27.80	27.90
January...	25.70	22.70	23.20	24.10	29.30	28.20	28.20	28.10
February..	25.10	23.40	23.90	24.40	29.40	28.00	28.20	28.10
March....	25.10	24.60	24.80	26.40	29.40	28.10	28.30	28.20
Season average...	30.50	24.50	24.60	25.00	---	---	---	---

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