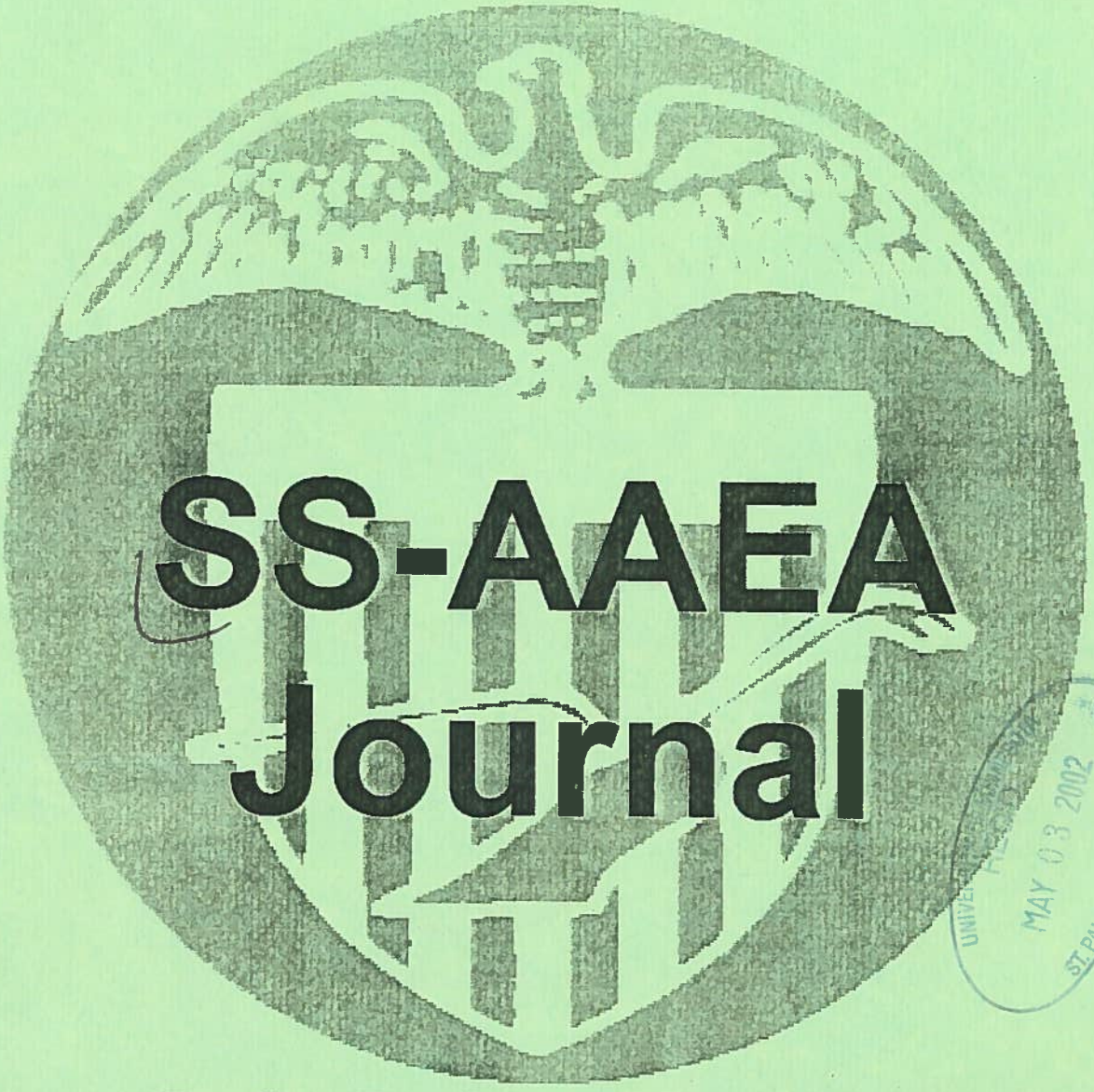
STP, Pea



SS-AAEA Journal

2000-2001

2nd Place

National Borders and the Trade of Agricultural Commodities in Canada

Blain M. van Melle

National Borders and the Trade of Agricultural Commodities in Canada

Abstract

Building on the work of previous studies, this paper analyzes the effect that national borders have on reducing the trade flows of agricultural commodities in Canada. Using a standard gravity model, a series of estimates were calculated to determine the border effect between Canada and the United States, the Prairie Provinces and the United States, Canada and Mexico, and the Prairie Provinces and Mexico. As well, the gravity model was used to test whether regional trade agreements in the 1980s and 1990s had the desired effect of reducing trade barriers and promoting trade.

Using data from a plethora of sources, the border effect was calculated for the trade flow values of 1) grains, 2) meat, fish, and dairy, 3) fruits and vegetables, 4) other agriculture, and 5) total agriculture. When dealing with Canada as a single entity, the border effect was found to vary substantially across commodity categories, with values ranging from a high of 145.5 in the category of meat, fish, and dairy in 1998 to a low of 13.5 in the trade of grains in 1997. When the model was estimated for the Prairie Provinces (as distinct from rest of Canada), there was still substantial variance in the border effect across commodity categories. However, the Prairie Provinces portrayed a lower border effect than the other provinces, implying that they are more open to the trade of agricultural commodities. When testing the effect of regional trade agreements on reducing the border effect, it was found that there was a significant drop in the border effect with respect to Canada and Mexico after the signing of the NAFTA. It was therefore concluded that Canada is progressing towards freer trade, but significant border effects remain.

3rd Place

The Economic Effect of the Fast Grass Price Rebate Program on the Washington Asparagus Industry

Kelli J. Myers

The Economic Effect of the Fast Grass Price Rebate Program on the Washington Asparagus Industry

Abstract

Over the past decade the Washington asparagus industry has become more reliant upon the fresh rather than processed asparagus market outlets. From 1989 to 1998 the percentage of the crop sold in the fresh market grew from 34% to 44%. The harvesting of asparagus in Washington takes place after Mexico and California are already supplying the market. As Washington enters the market and overlaps with the California asparagus season, there is often too much asparagus on the market and prices fall. The Washington asparagus industry experiences these low prices and has difficulty increasing their market share. To combat this problem, the Washington Asparagus Commission has instigated a price rebate program for wholesale and retail buyers during time periods of oversupply. The rebate program was named "Fast Grass" and began in 1997. The implementation of the program resulted in growth in Washington's market share. Whether the benefits of the program exceed the costs was the focus of this research. The isolated effects of the Fast Grass program on market shares and increased revenues of fresh Washington asparagus were analyzed.

4th Place

Storing Milk Production Capacity: Factors Influencing the Transition from Pasture-Based to Confinement-Based Dairies

David Ratliff

Storing Milk Production Capacity: Factors Influencing the Transition from Pasture-Based to Confinement-Based Dairies

Abstract

Technological developments in the last 50 years have led to interesting changes in the dairy industry. The advent of cost-effective heating and air-conditioning systems have made large confinement-based operations feasible. This has allowed dairies in non-traditional states such as Arizona, where winter weather is not a deterrent to calving year-round.

We compare pasture-based operations, in which most of the herd is calved in the spring, with confinement-based dairies in which calving occurs throughout the year. Calving most of the herd in the spring causes excess supply of fluid milk in the summer and short supplies in the winter. Pasture-based dairies choose herd size to produce enough to meet demand in winter months, while minimizing the cost of oversupply in summer months. We argue that just as storage solves the peak-load production problem, year-round calving allows for "storage" of productive capacity, reducing the biologically-driven cycles in milk production. We compare the profits of pasture-based and confinement-based dairies, and conclude that small dairies remain pasture-based because they are not able to cover the large fixed costs needed to become confinement based. Large dairies increase their profits by becoming confinement-based, which allows them to distribute milk production throughout the year.

5th Place

Regulating Agricultural Biotechnology: Implications for US Soybean Exports

Jason Franken

Regulating Agricultural Biotechnology: Implications for US Soybean Exports

Abstract

This paper assesses the current status of biotechnology in US production agriculture and poses the question, "How does that status position the US in world markets?" Referenced surveys measure the attitudes of American and European consumers toward Genetically Modified Organisms (GMO's) and provide some insight to consumer preferences and demand for non-GM products. This paper identifies international trade patterns that may be related to perceptions of GMO's and existing GMO regulations. The possible effects of proposed GMO legislation are also considered. The paper focuses on soybeans, because GM soybeans are the prominent GMO planted. Policies toward GMO's and trading patterns of the European Union (EU) and Brazil are also discussed. The practices of identity preservation and segregation of non-GM crops from GM-crops are recognized as possible avenues to ensure the US's ability to serve export markets. This paper also analyzes the US's ability to segregate and preserve the identity of non-GMO's and suggests the costs associated with this practice, as well as the premiums required to cover these costs.