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Discussion: Animal Identification Systems in North America: Achievements and Future Challenges

Ronald D. Knutson

Although Canada has developed an effective animal identification system, and the provinces are progressing toward a system that has full traceback capabilities, the U.S. and Mexico have made little or no progress. Contemporary U.S. proposals for state initiatives will not work. In the meantime, the U.S. livestock industry will continue to lose markets for its products and has little to no basis for complaining about lost sales and the lack of open markets. Also indentified are relevant economic and political principles that both underlie animal identification systems and the failure to make positive steps forward toward establishing a North American animal identification system.

Key Words: animal identification (ID), zoonoses, livestock diseases, North American Free Trade Agreement (NAFTA)

JEL Classifications: F13, H41, I19

Explaining the differences in the evolution of animal identification (ID) policy among the U.S., Canada, and Mexico involves an interesting mix of economic, cultural, and political considerations. Each of these considerations is discussed in varying degrees in the articles by Anderson, Ortega and Peel, and Carlberg. These discussion comments are designed to coalesce the major forces leading to a lack of consensus on the appropriate trilateral policy to deal with the animal ID issues related to and the related disease problems. Not addressed are the invasive specie origins of these disease problems, which could be the subject of another SAEA interdisciplinary session.

Economics

The economic considerations for each country are much the same, although there appears to be substantial asymmetry among the countries as to how well their consequences are realized, particularly at the cattle-raiser level. These economic considerations involve trade, public good, free rider, market failure, and second-best considerations. Each of these considerations warrants comment in theory and in practice.

Trade

As pointed out by Carlberg, the aggressive Canadian response to the BSE incident was heavily motivated by the fact that their beef, pork, and dairy industries are export-dependent. It is generally recognized that the U.S. live and meat markets are critically important for Canadian beef and pork. Often missed by analysts is that fact that Canadian dairy farmers depend on U.S. and Mexico for its sales of female dairy yearlings and springers. This excess supply is a result of Canadian limits on milk production (Knutson et al., 1997).

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U.S. farmers, ranchers, and the USDA have failed to realize that Canadian animal ID policy has put them at an absolute disadvantage in exporting meat to important markets such as Japan and South Korea. U.S. opponents to animal ID have put their Foreign Agriculture Service (FAS)/USDA and U.S. Trade Representative (USTR) negotiators in a very poor negotiating position for opening markets and expanding exports. USDA policymakers are at fault because, as expanded on subsequently, they initially sided with beef interests in opposition to a common U.S.–Canadian animal ID policy, established an ineffective voluntary animal ID program, opposed House of Representatives' leadership in support of a mandatory animal ID position, and then chose an ineffective state-run option.

Public Good, Free Riders, and Market Failure

Clearly, animal ID qualifies as a public good, which was defined by Samuelson (1954) as "...[goods] which all enjoy in common in the sense that each individual's consumption of such a good leads to no subtractions from any other individual's consumption of that good..." Voluntary animal ID systems have not worked because the achievement of benefits (disease control and/or eradication) depends on everyone participating. Therefore, this is a classic case of market failure in which individual rational decision-making does not achieve efficient results either in allocative or distributive terms.

Second Best

Equally important, experience and logical reasoning indicate that there is no second-best solution when it comes to animal ID. For pests such as the Mediterranean fruit fly, control is a rational second-best policy option because of cost and eradication feasibility considerations. This is not the case for animal diseases such as bovine tuberculosis, brucellosis, bovine spongiform encephalopathy (BSE), swine fever, or avian influenza in which eradication is an effective option endorsed by the World Organization for Animal Health (OIE, 2010).

Culture

As used here, culture refers to a shared set of attitudes, values, goals, and practices that characterize a group of individuals. The individuals discussed here are those who raise cattle, because they are the primary obstacle to achieving an effective North American Free Trade Agreement (NAFTA)-wide animal ID policy.

Property Rights

One of the strongest values held by farmers, at least in the U.S., appears to involve the rights to private property. This is particularly the case for beef cattle raisers. Private property rights include 1) control of the use of the property; 2) the right to any benefit from the property; 3) a right to transfer or sell the property; and 4) a right to exclude others from the property. Smith (1776) made private property rights central to capitalism in that these rights encourage their holders to develop the property, generate wealth, and efficiently allocate resources based on the operation of markets.

Individualism and Market Justice

Friedman (1962) expanded on private property rights by arguing that people are entitled to the benefits of their individual efforts as they operate in a capitalistic, free-market environment that is unencumbered by government regulation. Animal ID is viewed by beef cattle raisers as government regulation designed to limit their individual efforts and their success as entrepreneurs in maximizing profits to build wealth. In other words, they are opposed to governmental paternalism interfering against their will while the government claims that cattle raisers will be better off and protected from harm.

Egalitarianism

Egalitarian principles of equal economic, political, and social status are substantially different among cattlemen in Mexico in particular than in either the U.S. or Canada. These differences may arise from the land grants provided during the colonial period of Latin America, a vestige of

Spanish rule. Although vestiges of this Spanish colonial system can also be identified in parts of Texas, Arizona, New Mexico, and California, settlement policies in the U.S. were very different (Knutson, Penn, and Flinchbaugh, 1998). In addition to the Homestead Act distributing relatively small parcels of land at little or no cost to would-be farmers, land grant colleges, agricultural experiment stations, and extension services were established to provide educational service that allowed these farmers to become efficient competitors in a system based on capitalistic democracy (Rasmussen, 1962; Bowers, Rasmussen, and Baker, 1984). Canada developed similar smaller farmer agricultural systems.

There were at least two important results of these policy and structural differences: 1) an elite class of cattle raisers developed in Mexico that continues to have a dominant influence and controls policies affecting ranching. Although similar structures can be identified for ranching in parts of the U.S. western states, the overall structure is considerably more decentralized with less class influence; 2) the northern border states of Mexico have been more aggressive than Mexico Ministry of Agriculture (SAGARPA) in developing animal ID systems because their feeder cattle market is export-dependent, as explained by Peel and Ortega.

U.S. Politics

Anderson effectively traces the political forces influencing the evolution of animal ID U.S. programs. This perspective is by stakeholder group.

Dairy

U.S. milk producers support animal ID for a variety of reasons. Milk is a carrier of a number of zoonosis pathogens, which dairy farmers have worked hard to eradicate. Mandatory animal ID is viewed as an important step in achieving eradication of diseases such as bovine tuberculosis and brucellosis across the U.S. In addition, as noted previously, large U.S. dairies typically have a higher cull rate and have become dependent on imports of dairy heifers and springers from Canada to replenish the U.S. milking herd. Animal ID is seen as an aid to keeping markets open. A smaller number of leading purebred producers desire to freely export cattle.

Cattle Feeders and Meat Packers

Cattle feeding and meat packing is a big business that depends on volume for efficiency. Feeders have depended on a regular supply of feeder cattle from both Mexico and Canada. Those nearer the borders are more dependent; and interruptions of supply such as caused by the BSE incident created an important supply issue for U.S. feeders and packers. However, certainly, these problems were not nearly as big as for Canadian feeders.

R-CALF

R-CALF has become a fast-growing and leading force in opposition to animal ID, in opposition to increased concentration in the beef industry, and in support of COOL. Three key positions are related to animal ID: 1) general opposition to any form of mandatory or voluntary animal ID on domestically born and raised cattle; 2) require all imported livestock to be permanently marked with a mark of origin to aid in foreign animal disease tracebacks after importation; and 3) require that imported cattle be physically segmented from U.S.-born and raised cattle. R-CALF can legitimately be classified as a populist organization.

Other Cattle-Raising Organizations

A host of other cattle-raising organizations compete directly with R-CALF for members. The cattle-raising members of these organizations have mixed emotions about animal ID and are not as likely to take a position and are even less likely to come out in public on the issue. On the one hand, they realize that their market for cattle is with feeders and that it is in the greater industry interest that they get along with both feeders and packers. On the other hand, they not only compete for membership with R-CALF, but their members have some of the same cultural characteristics as the R-CALF members.

General Farm Organizations

The general farm organizations, mainly the Farm Bureau and Farmers Union, might have played a political leadership role in bridging the gap between R-CALF and the other cattle-raising organizations. However, neither organization appeared to realize the economic consequences for trade of not adopting an effective animal ID system. This may be explained by the fact that the Farmers Union has never been a freer trade-promoting organization and even the Farm Bureau appears to have lost its zeal for freer trade. In addition, the Farm Bureau has substantial roots in private property rights and in opposition to governmental paternalism.

2010 U.S. Animal ID Developments

Anderson has discussed the post-NAIS 2010 USDA initiative for animal ID (APHIS, 2010), which is clearly a step backward. As Carlberg notes, the Canadian program is successful because the provinces build on a strong mandatory federal policy/program framework. The 2010 U.S. animal ID policy/program is built on an APHIS/USDA framework developed by voluntary "State-by-State and Tribe-by-Tribe animal traceability efforts." Clearly, this, like previous USDA animal ID efforts, is a waste of time and taxpayer money. It is doomed to failure from the get-go.

Concluding Remarks

The unfortunate conclusion of this analysis is that it will likely take a BSE-type issue centered in the U.S. for a mandatory U.S. animal ID program to become a reality. Both a Republican and a Democrat administration have dropped the ball in failing to recognize the public good dimensions of this issue as it affects the health and economic well-being of both producers and consumers. Just and Peterson (2010), in the January 2010 issue of the *American Journal of Agricultural Economics*, conclude that traditional economic explanations for behavior do not always explain how individuals respond to risk. This certainly applies to the U.S. livestock industry.

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