Current Trends in North American Supply Chain Management: Agriculture

The Case of Beef and Pork

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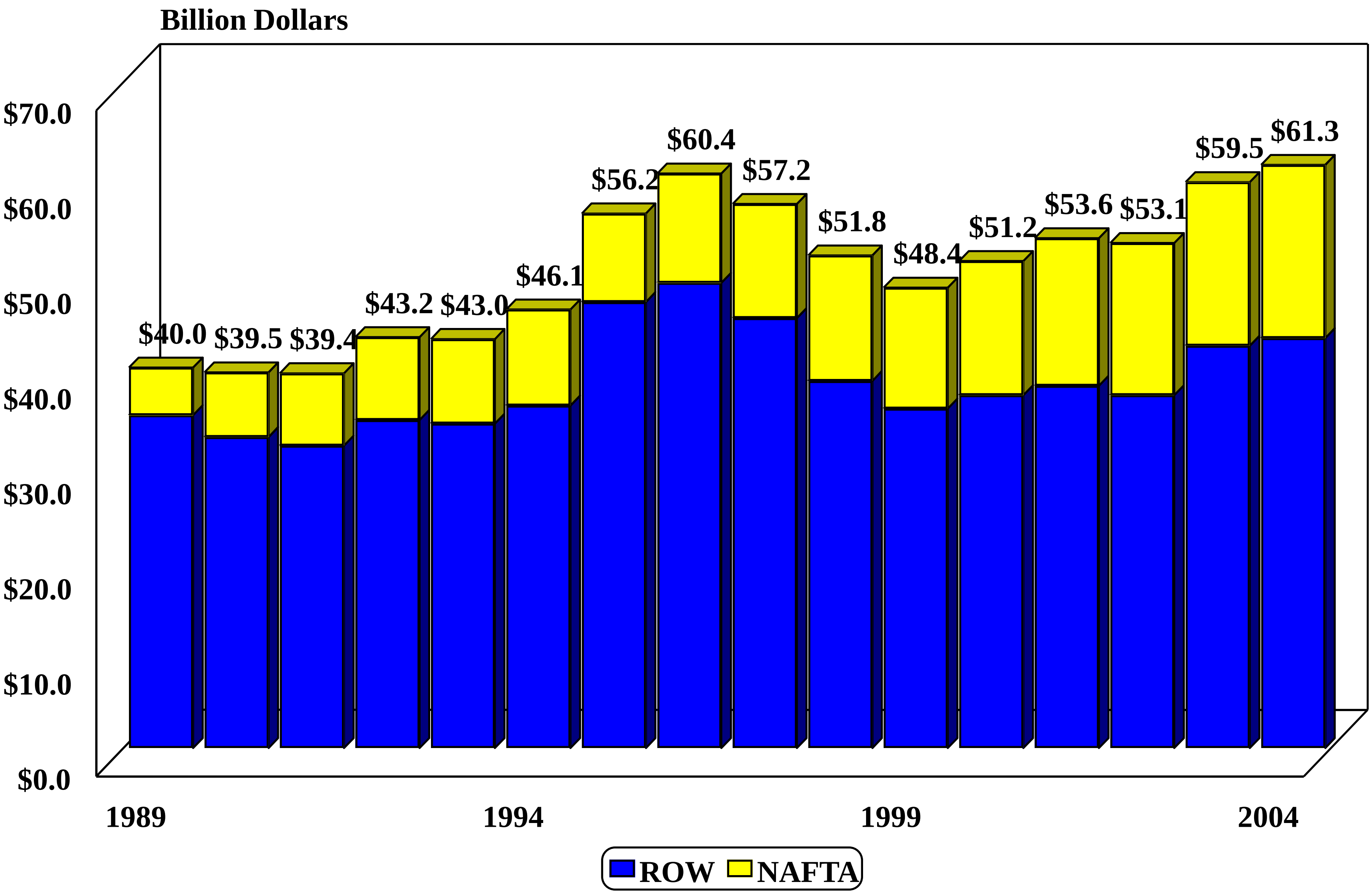
Overview

- Trends in North American Agricultural Trade
- The Growing Integration of the North American Beef and Pork Industries
- Factors Impacting the North American Beef and Pork Supply Chains
- Summary and Implications

Trends in North American Agricultural Trade

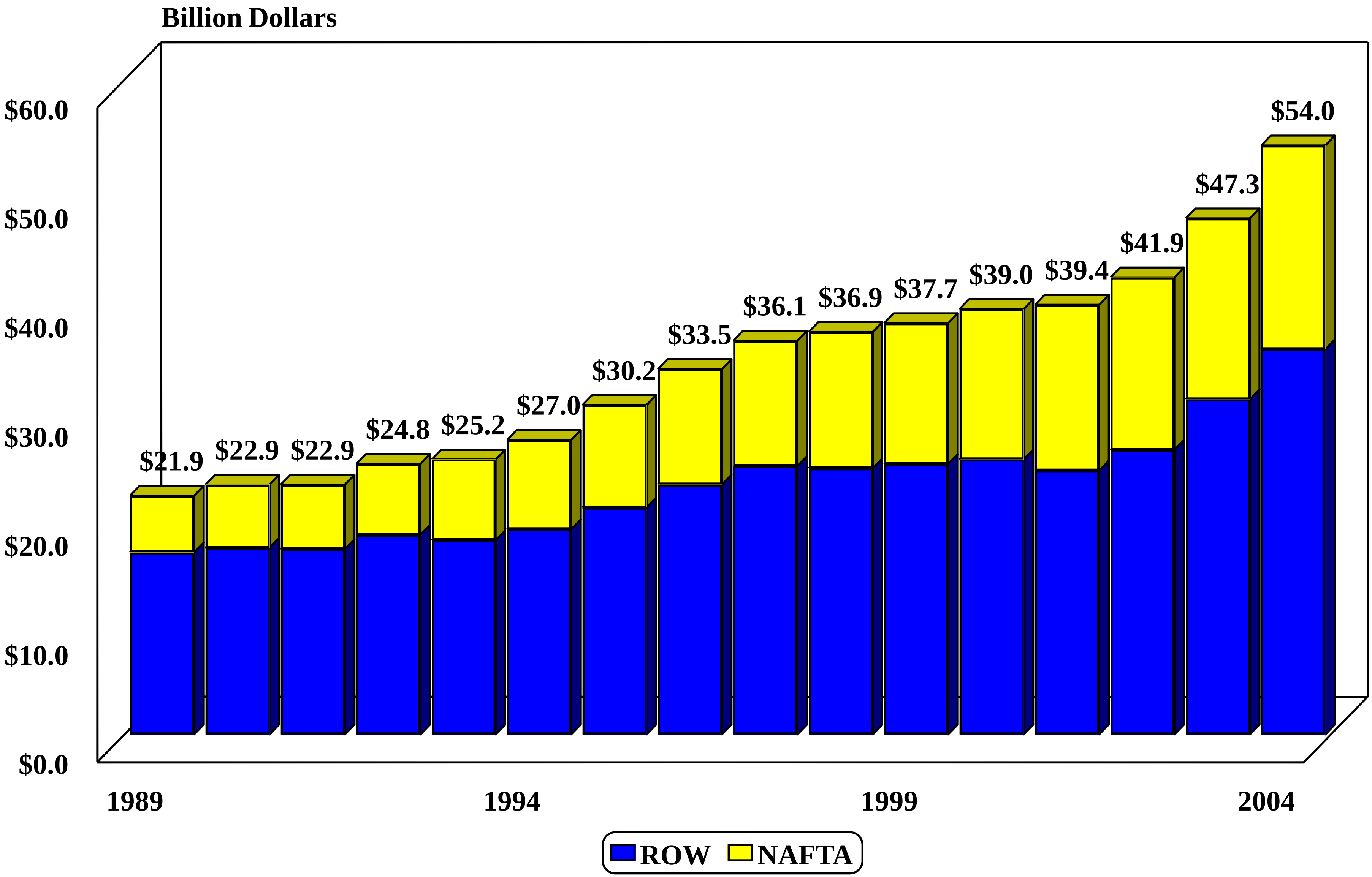
- Implementation of CUSTA (‘89) and NAFTA (‘94) Decreased Border Restrictions and Encouraged Integration
- U.S.-Canada and U.S.-Mexico Trade Began to Grow Significantly following CUSTA/NAFTA
- Canada-Mexico Trade Growing but Restricted by Geography and Large U.S. Market
- 30% of U.S. Ag Exports Now Go to N.A. (12.5% in 1989)
- 35% of U.S. Ag Imports Now Come from N.A. (24% in 1989)

U.S. Agricultural Exports



Source: Foreign Agricultural Trade of the United States, Calendar Year, USDA/ERS

U.S. Agricultural Imports

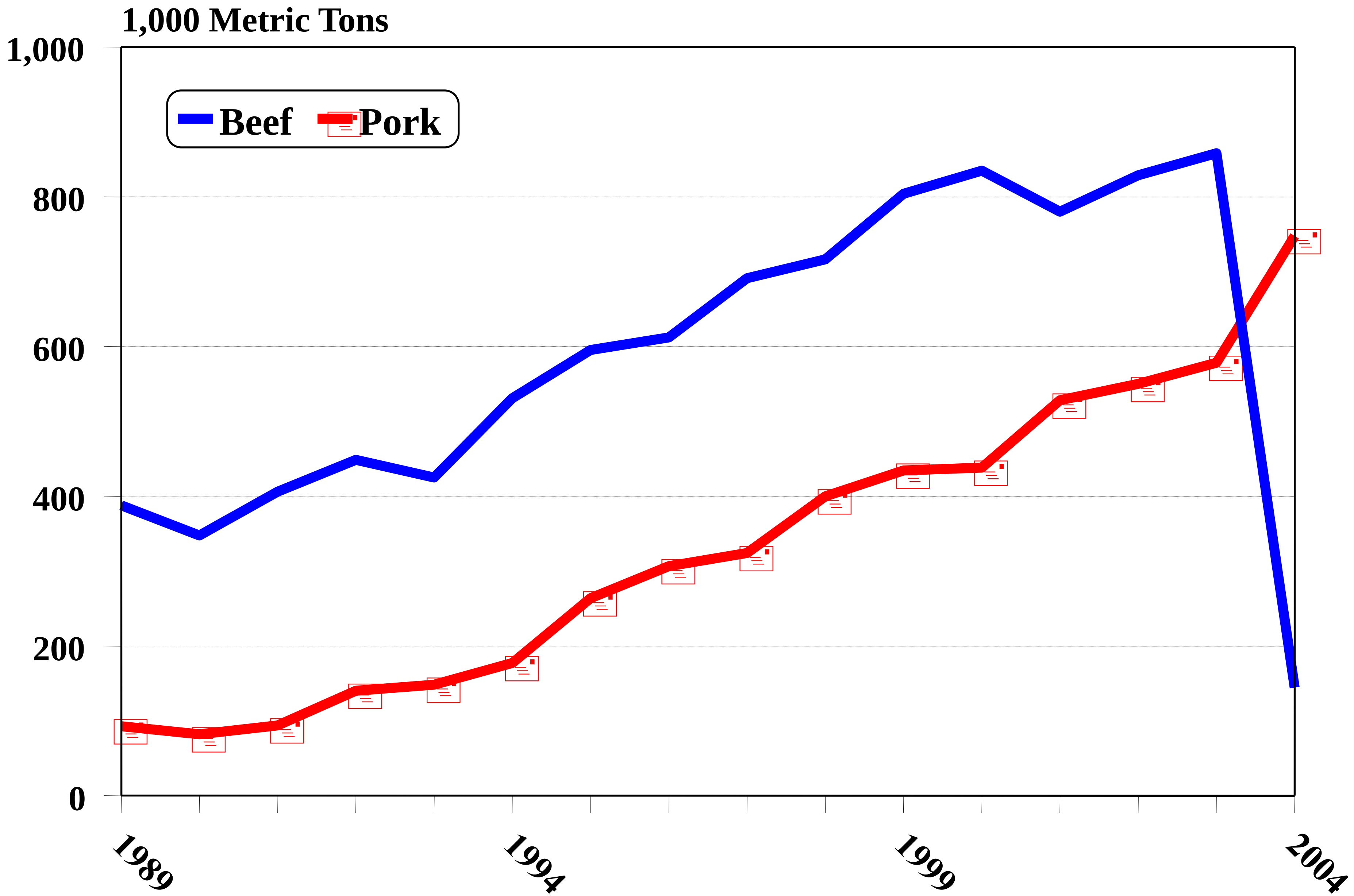


Source: Foreign Agricultural Trade of the United States, Calendar Year, USDA/ERS

The Evolving North American Beef and Pork Supply Chain

- **CUSTA and NAFTA Have Led to Greater N.A. Trade in Beef, Pork and Live Animals**
- **Greater Integration of Other Resources (Capital, Technology, Grains) Has Also Occurred**
- **A North American Beef and Pork Complex Has Resulted**
- **The BSE Outbreaks Changed the Nature of N.A. Beef Supply Chain**
- **N.A. Pork Supply Chain Has Stabilized**

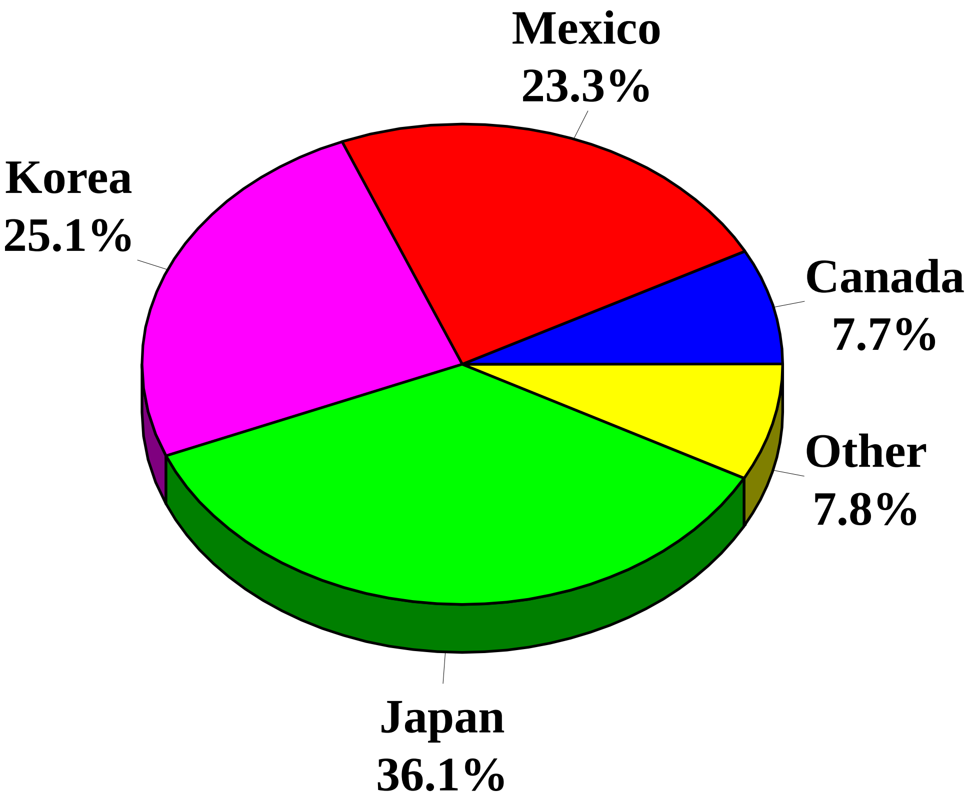
U.S. Beef and Pork Exports, 1989 - 2004



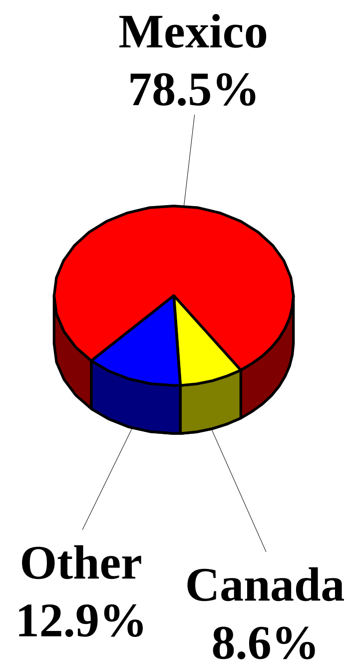
Source: PS&D Online, www.fas.usda.gov/psd

U.S. Beef Exports, 2003 & 2004

2003 Total: 820.6 TMT



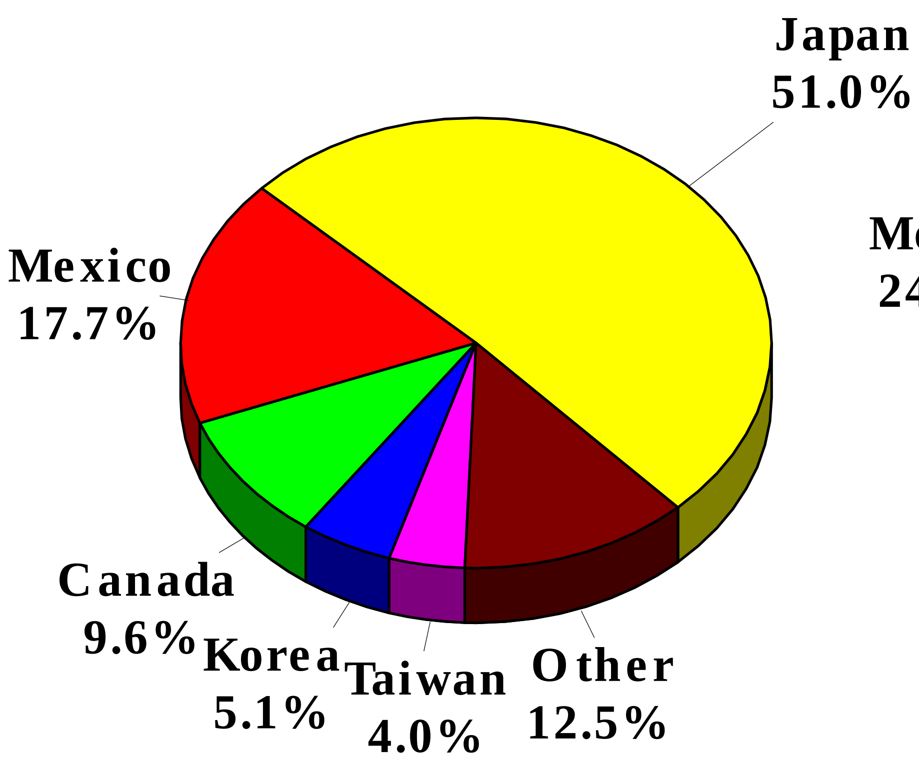
2004 Total: 135.6 TMT



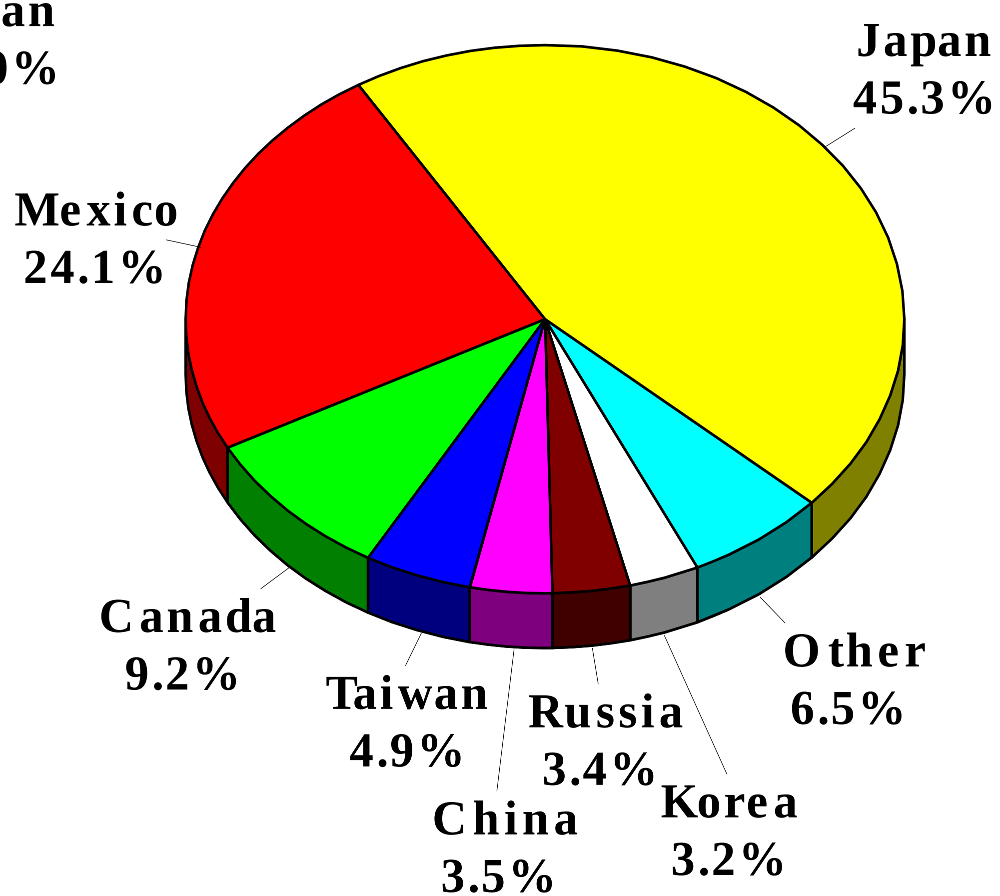
Source: U.S. Trade Internet System, www.fas.usda.gov/ustrade

U.S. Pork Exports, 2003 & 2004

2003 Total: 494.5 TMT

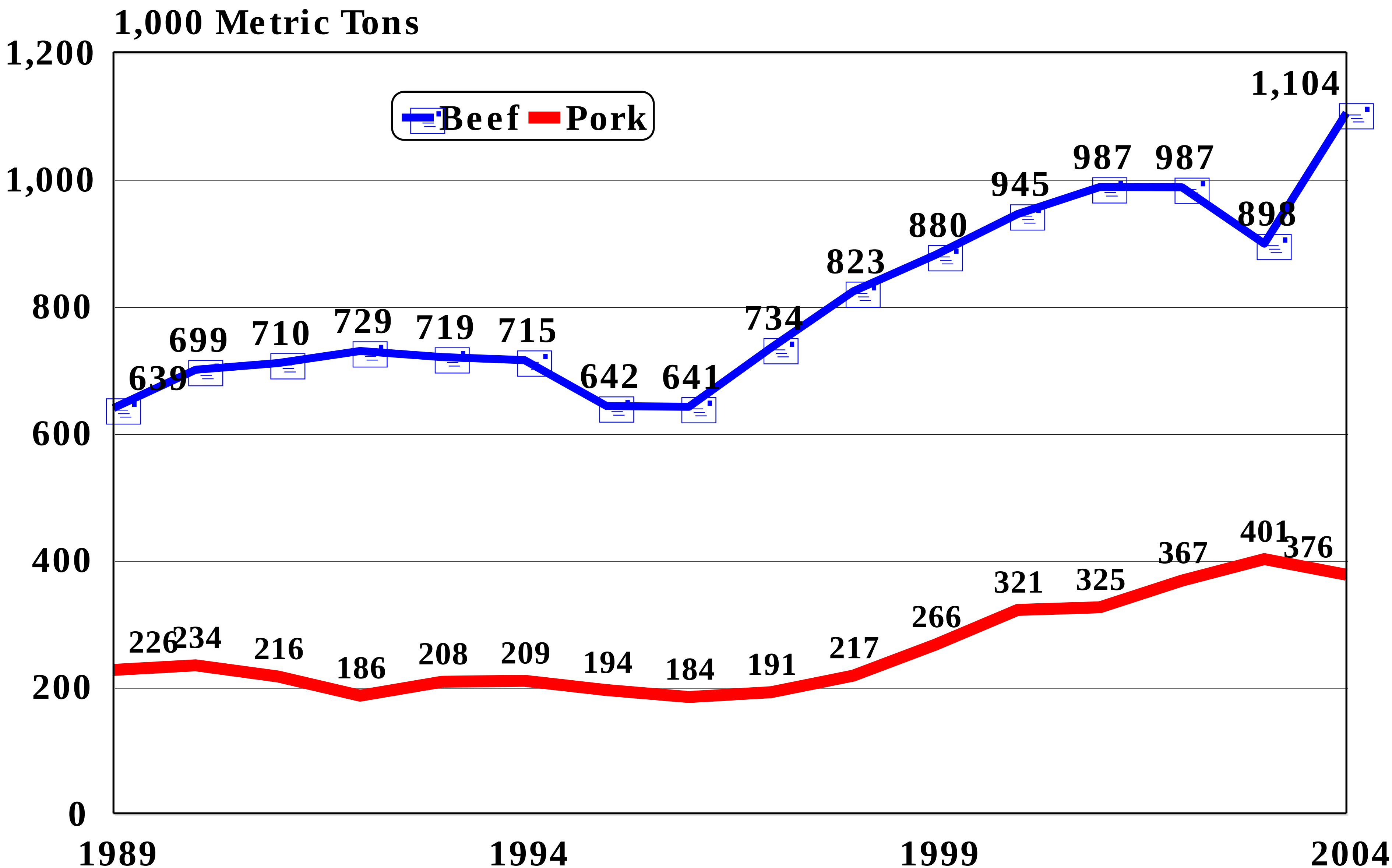


2004 Total: 651.1 TMT



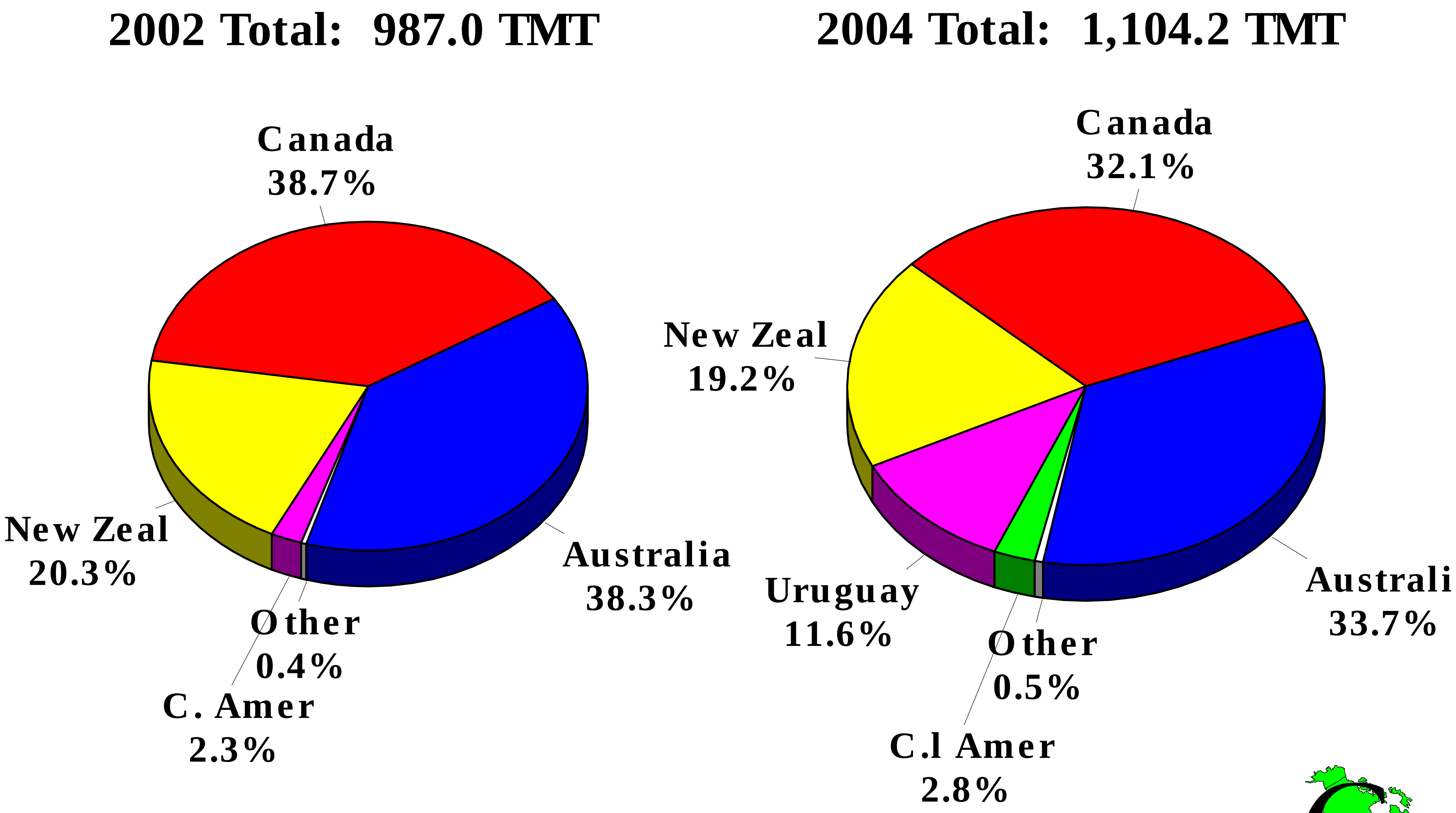
Source: U.S. Trade Internet System, www.fas.usda.gov/ustrade

U.S. Imports of Beef and Pork



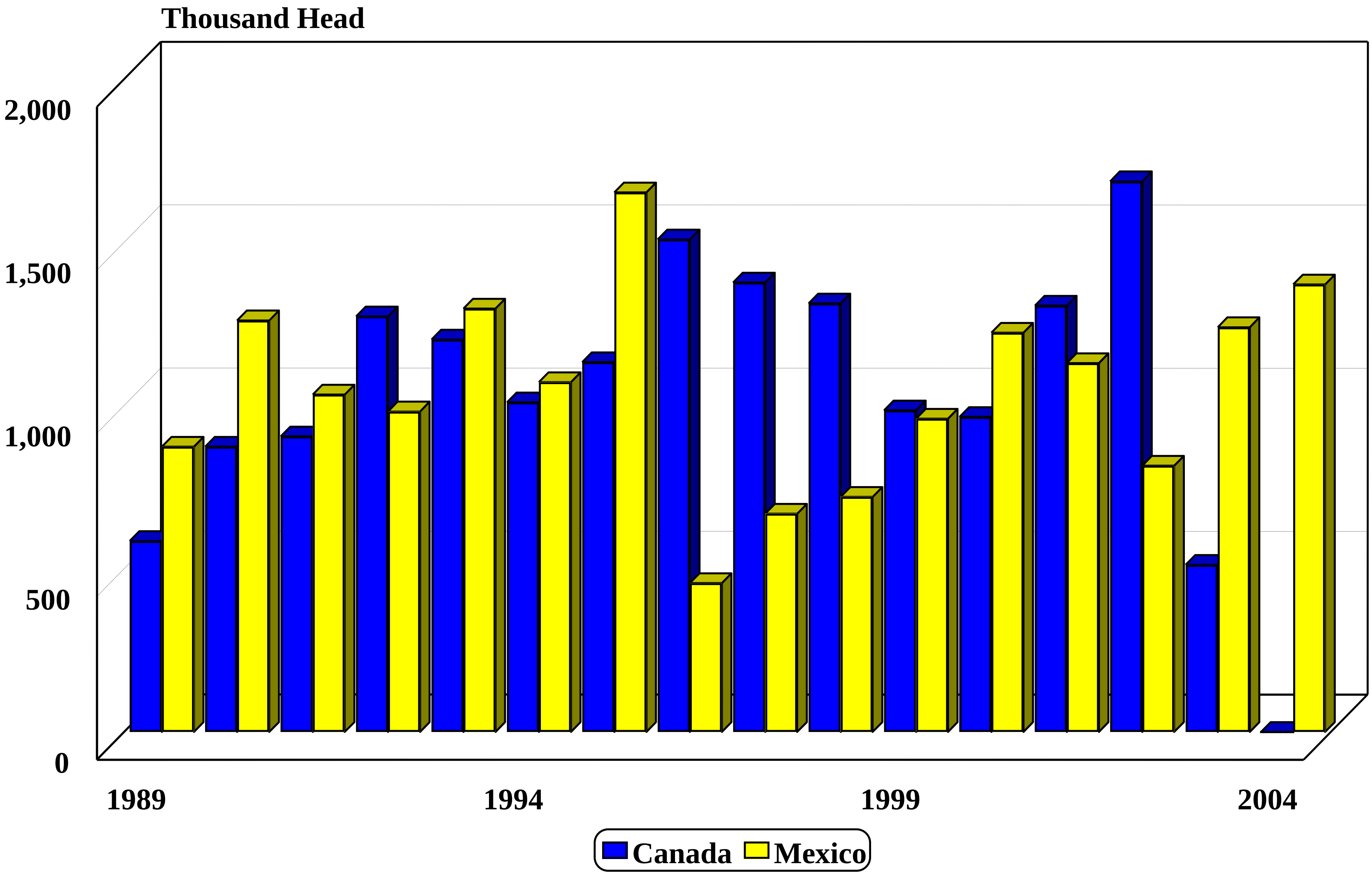
Source: U.S. Trade Internet System, www.fas.usda.gov/ustrade

U.S. Beef Imports, 2002 & 2004



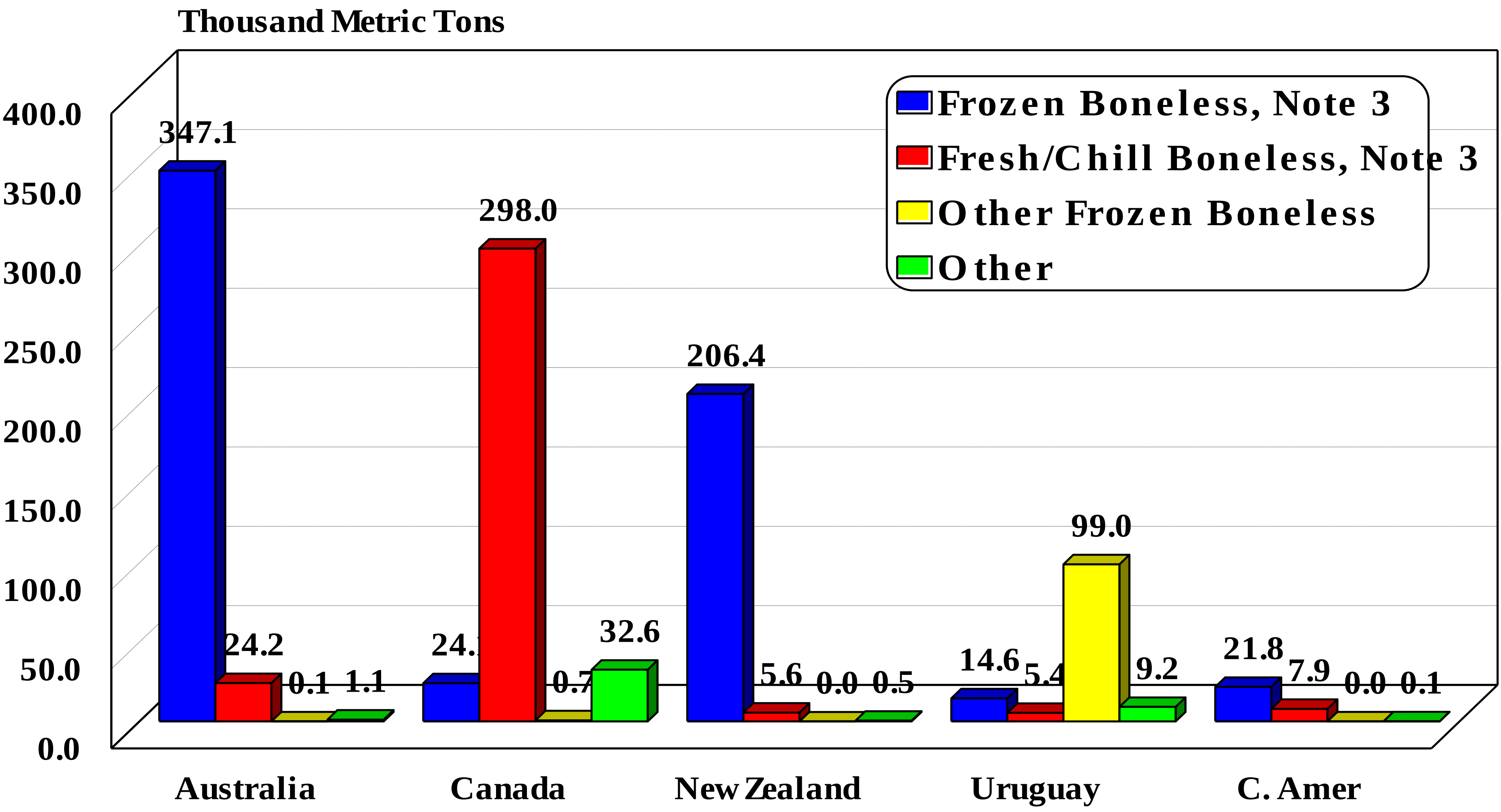
Source: U.S. Trade Internet System, www.fas.usda.gov/ustrade

U.S. Cattle Imports, 1989 - 2004



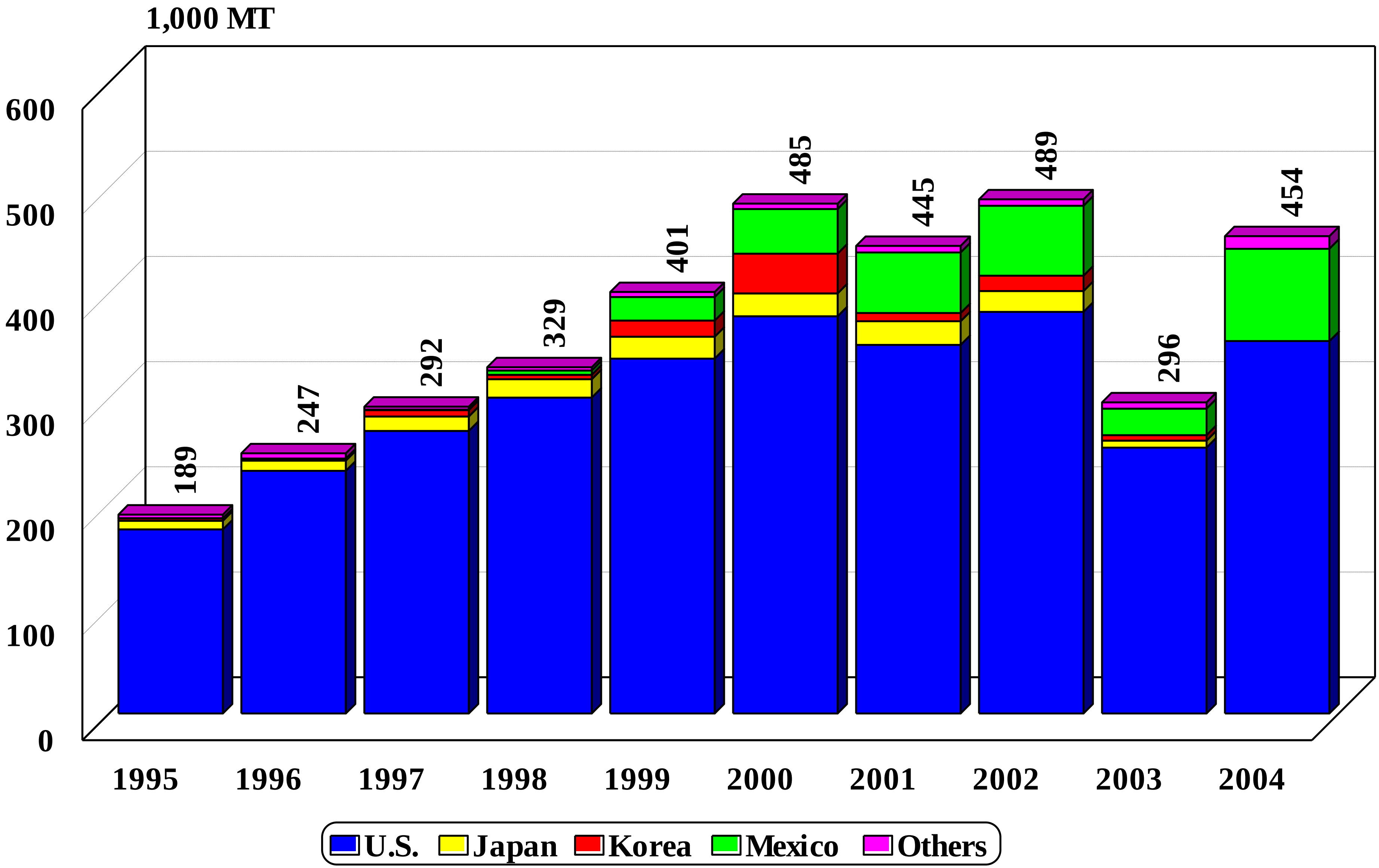
Source: Foreign Agricultural Trade of the United States, Calendar Year, USDA/ERS

Composition of U.S. Beef Imports by Source, 2004



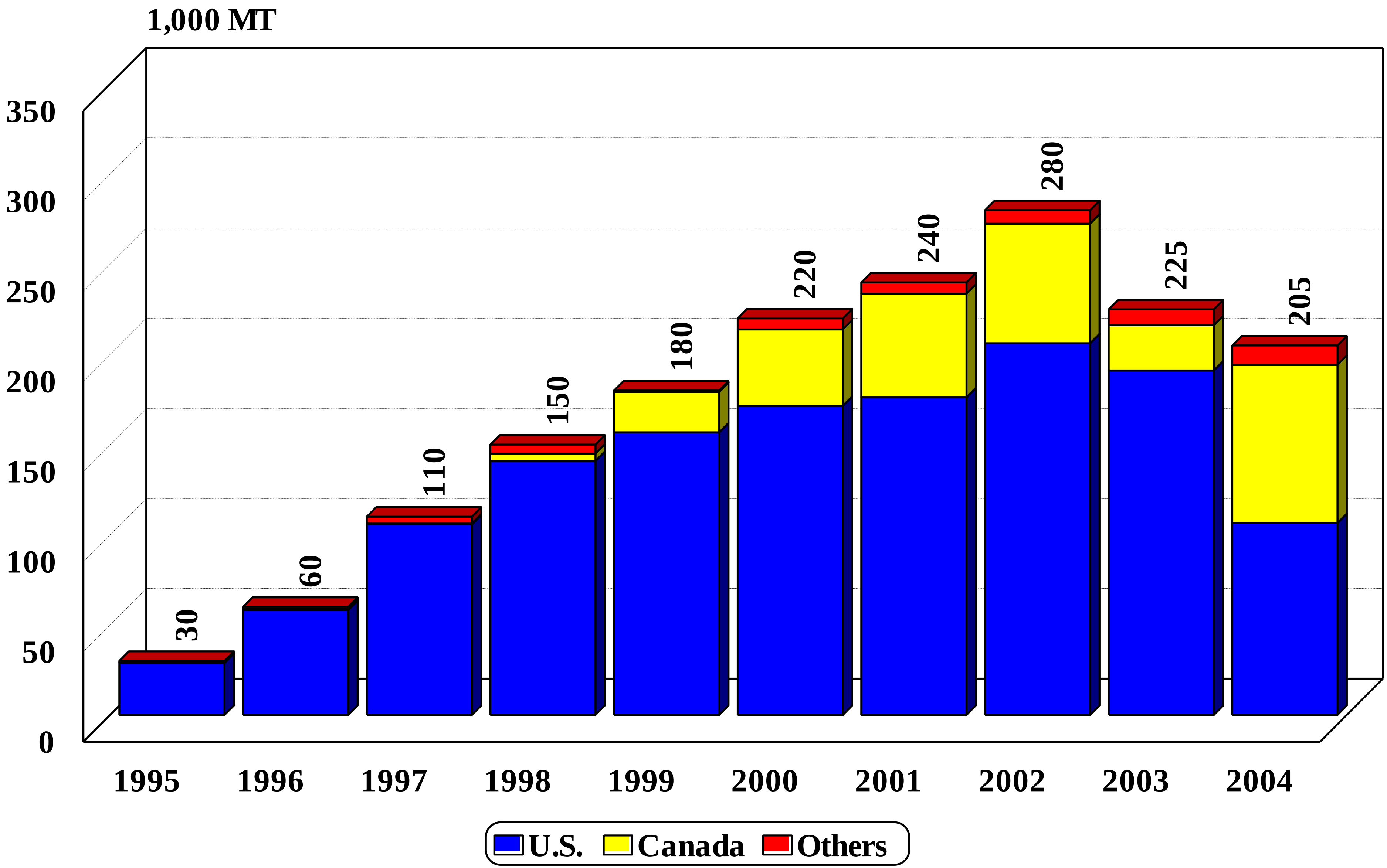
Source: USDA/FAS. ***Note 3*** **refers to beef entering under the TRQ,** ***Other Frozen Boneless*** **indidicates over-quota beef**

Canadian Beef Exports



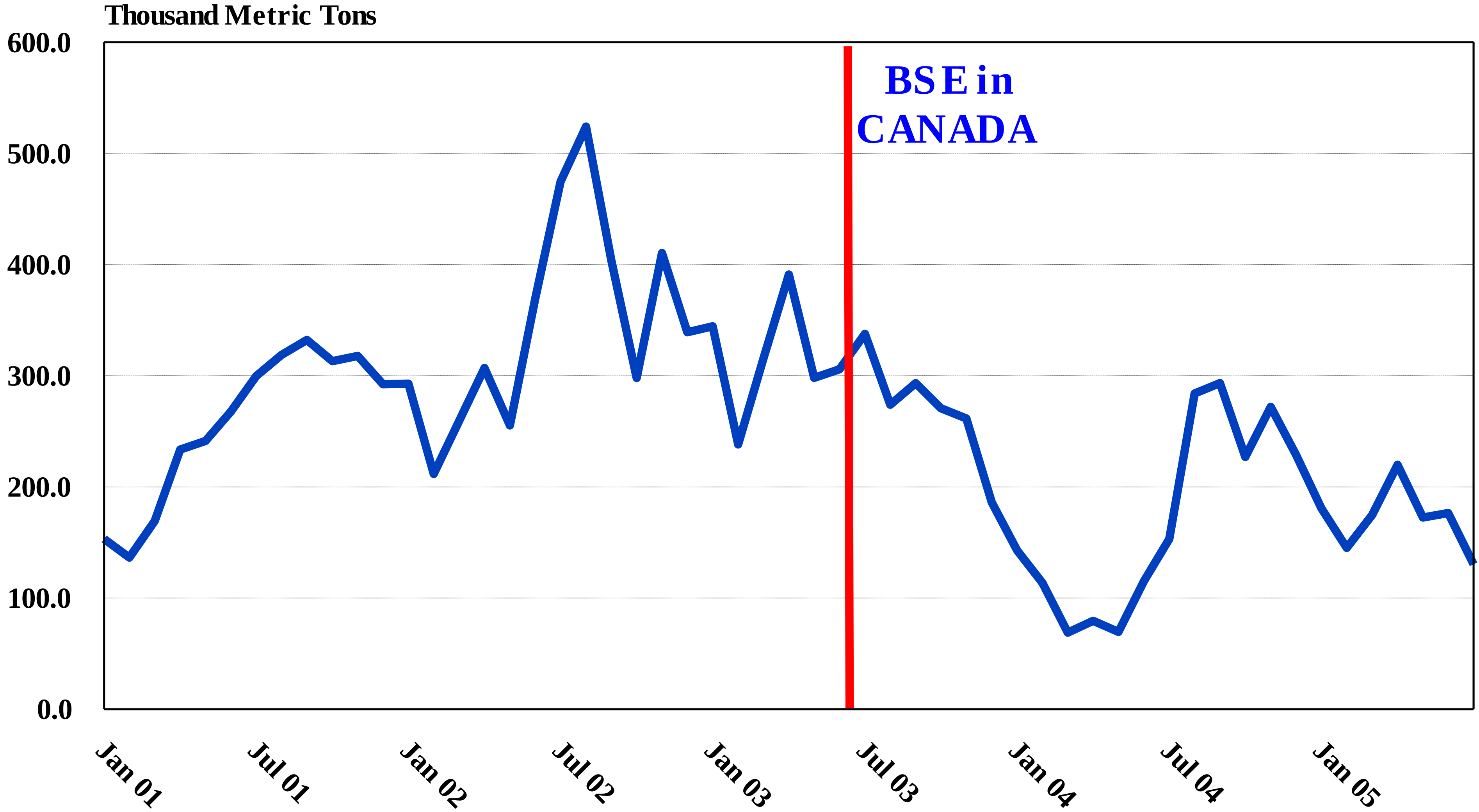
Source: Agriculture and Food Canada, USDA/FAS

Mexico Beef Imports



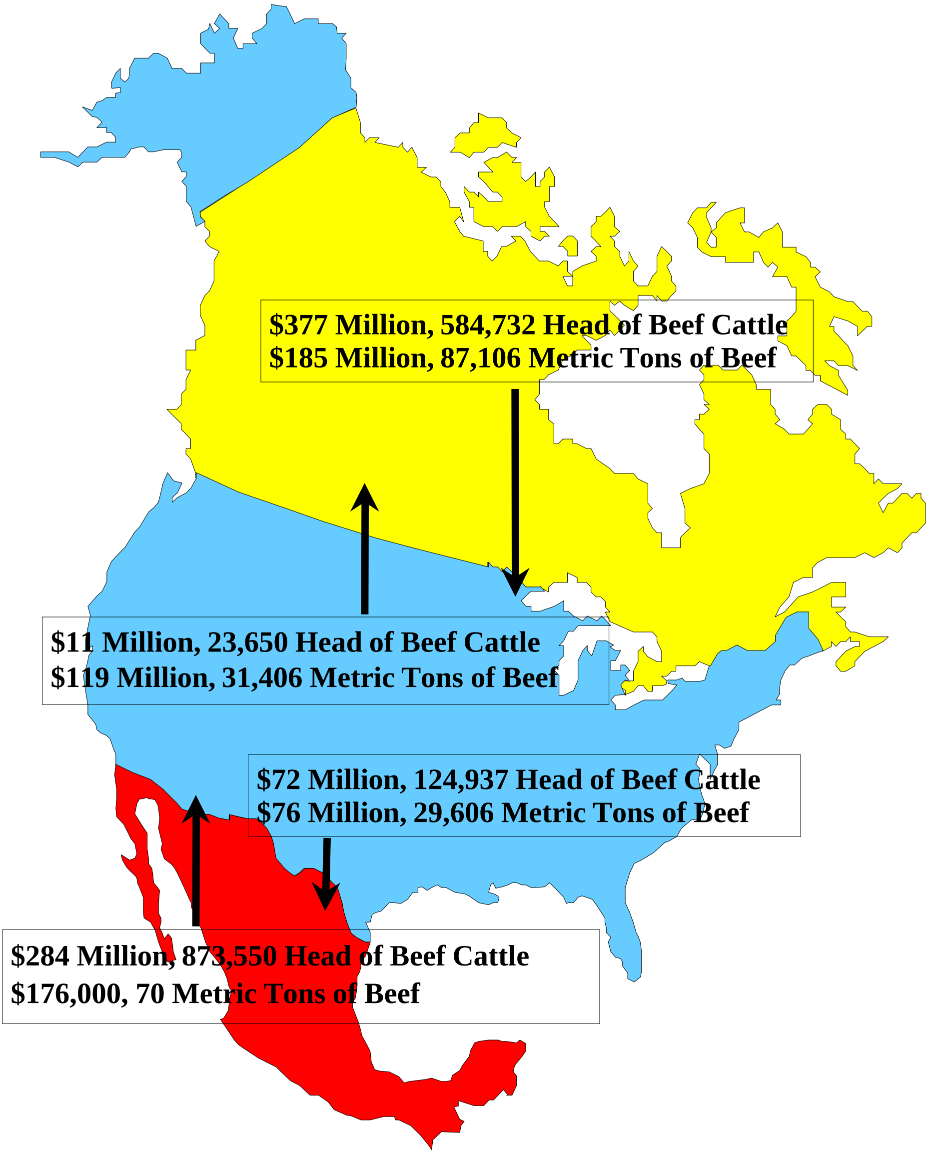
Source: FAS/USDA attache reports

Monthly U.S. Corn Exports to Canada, January 01 - July 05

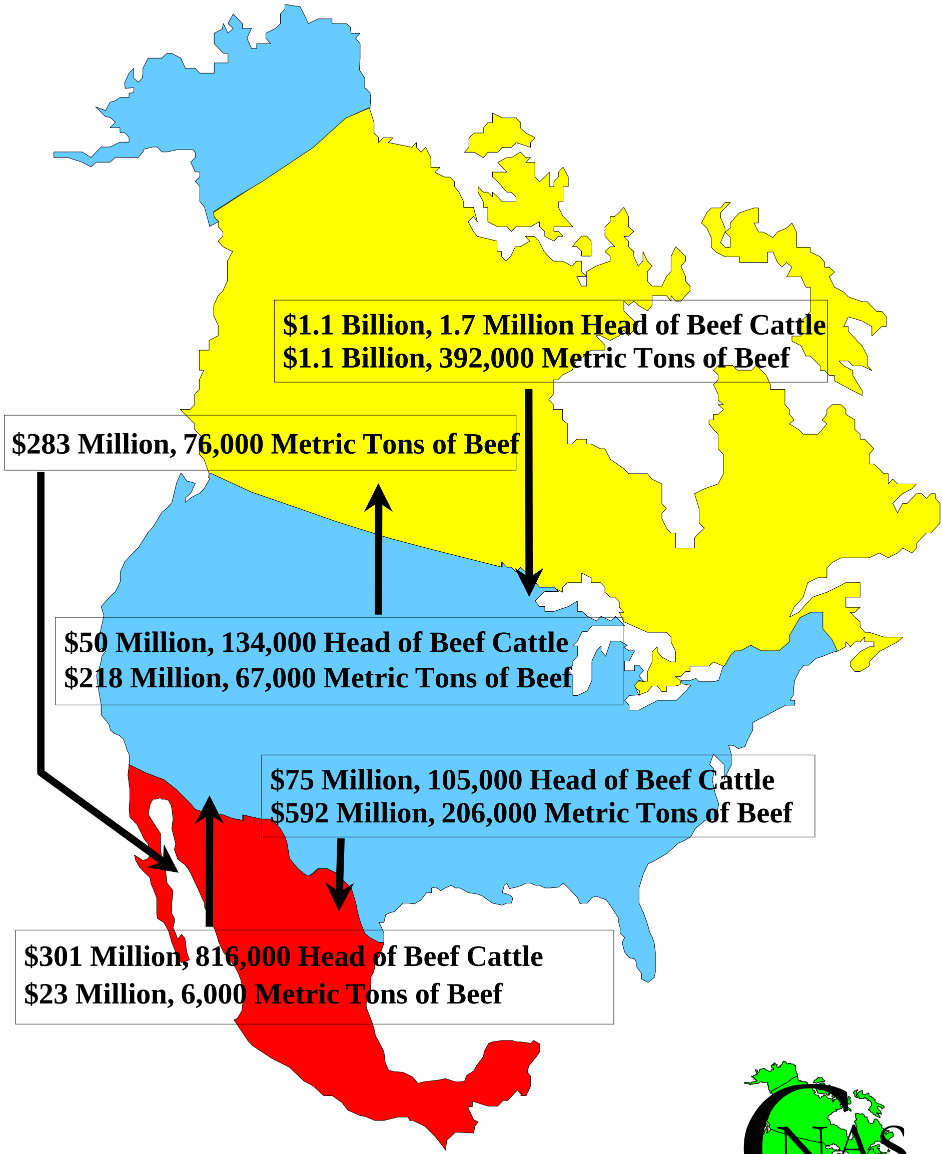


Source: U.S. Trade Internet System, www.fas.usda.gov/ustrade

Integration in the North American Cattle and Beef Industry, 1989



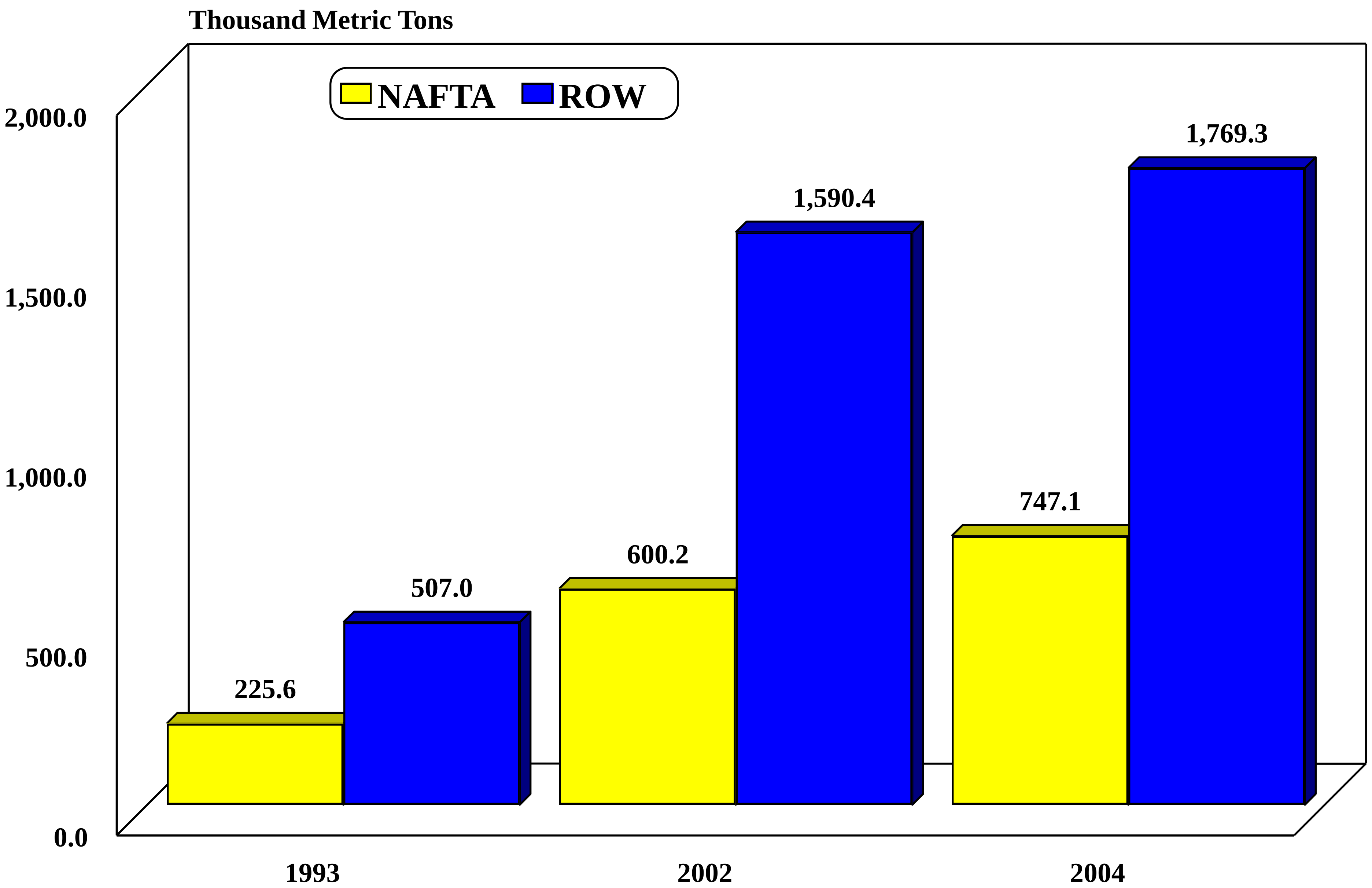
Integration in the North American Cattle and Beef Industry, 2002



The North American Beef Supply Chain: Comments

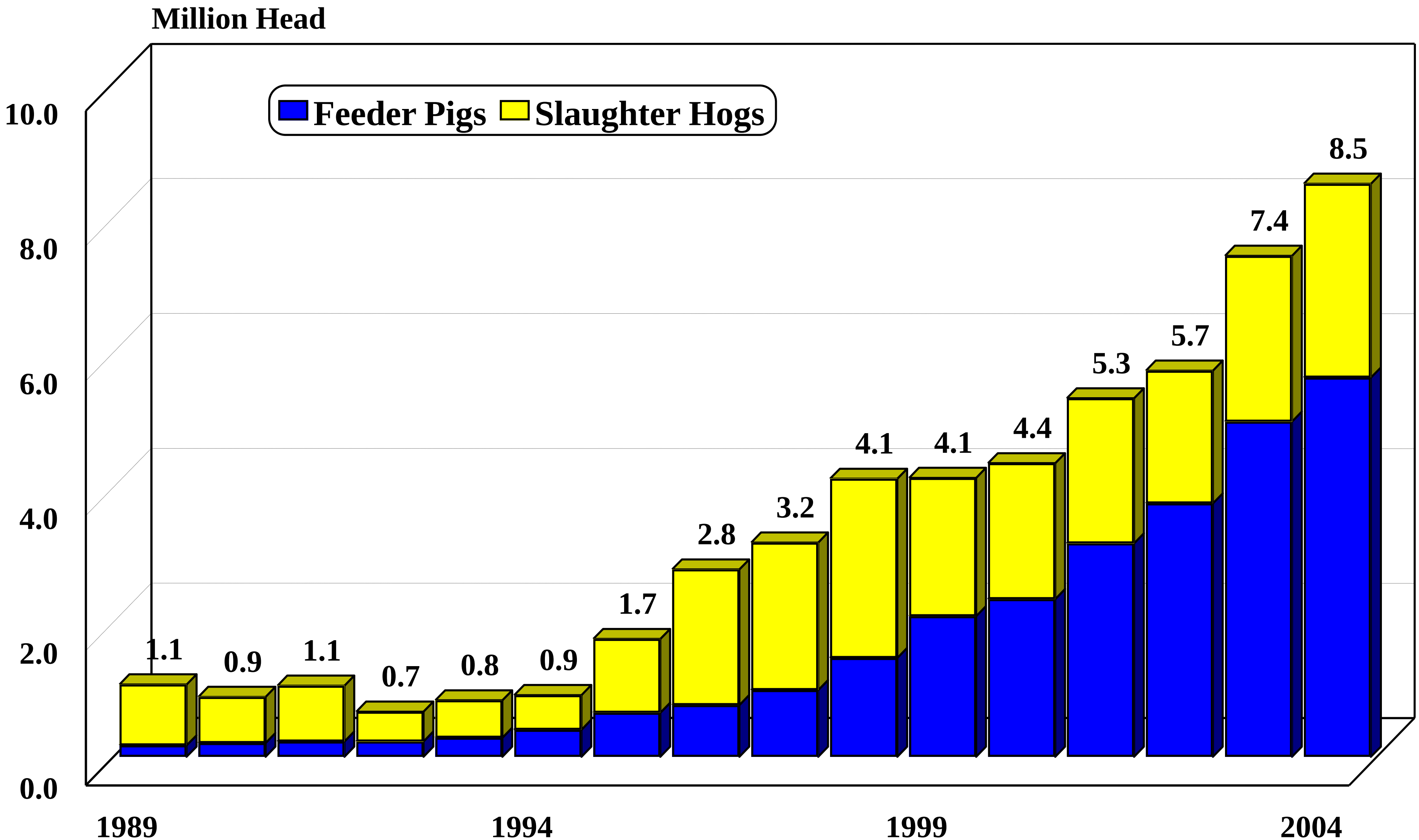
- **BSE Reduced and Altered the N.A. Beef Industry Integration, Especially Among Canada and the U.S.**
- **While Unable to Export Fed Steers to the U.S., Canada Increased Feeding, Slaughter Capacity, and Beef Exports to U.S.**
- **U.S. Firms (Tyson/IBP, Cargill) Have Increased Investment in Canadian Processing Plants**
- **Will Resumption of Canadian Cattle Exports to U.S. Spark Return to 2002 Scenario – Maybe but Doubtful**

Intra-NAFTA and ROW Pork Trade



Source: USDA/FAS and CanFax

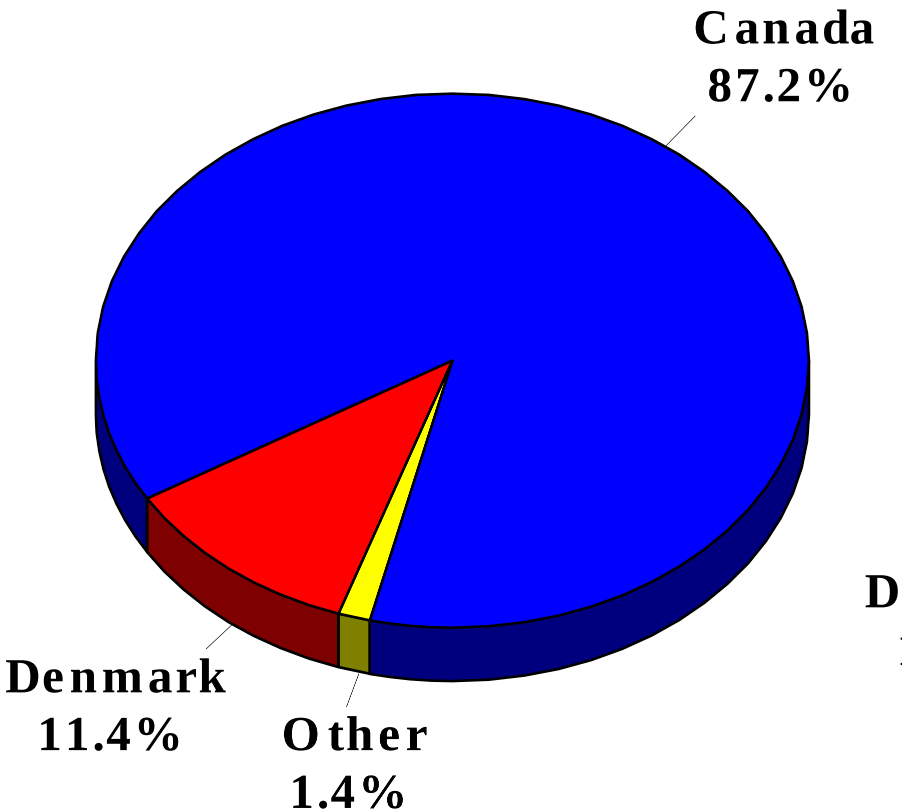
U.S. Swine Imports from Canada
1989 - 2004



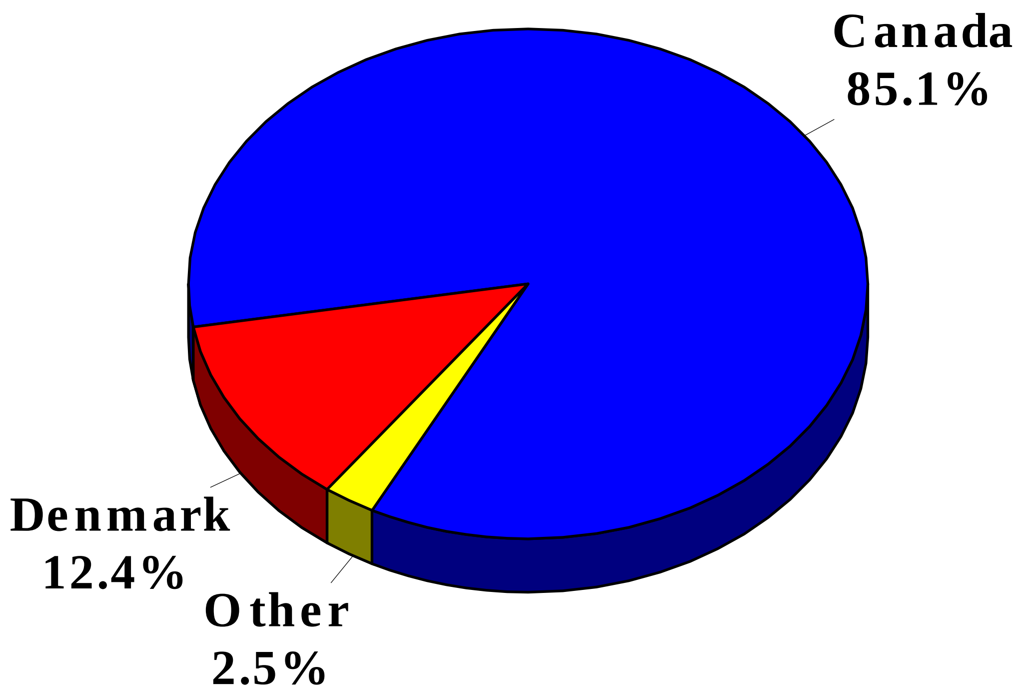
Source: Foreign Agricultural Trade of the United States, Calendar Year, USDA/ERS

U.S. Pork Imports, 2003 & 2004

2003 Total: 400.9 TMT

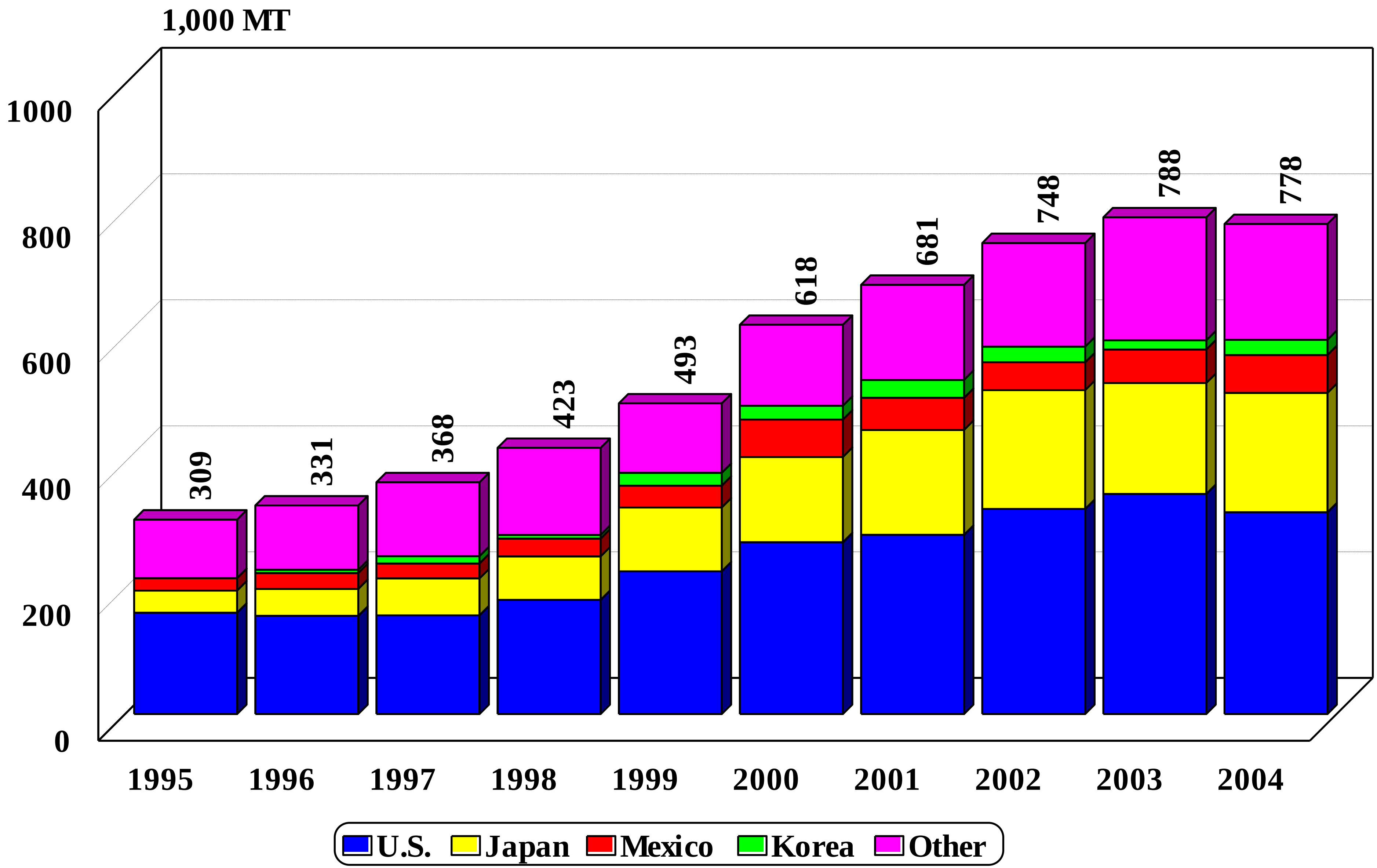


2004 Total: 376.3 TMT



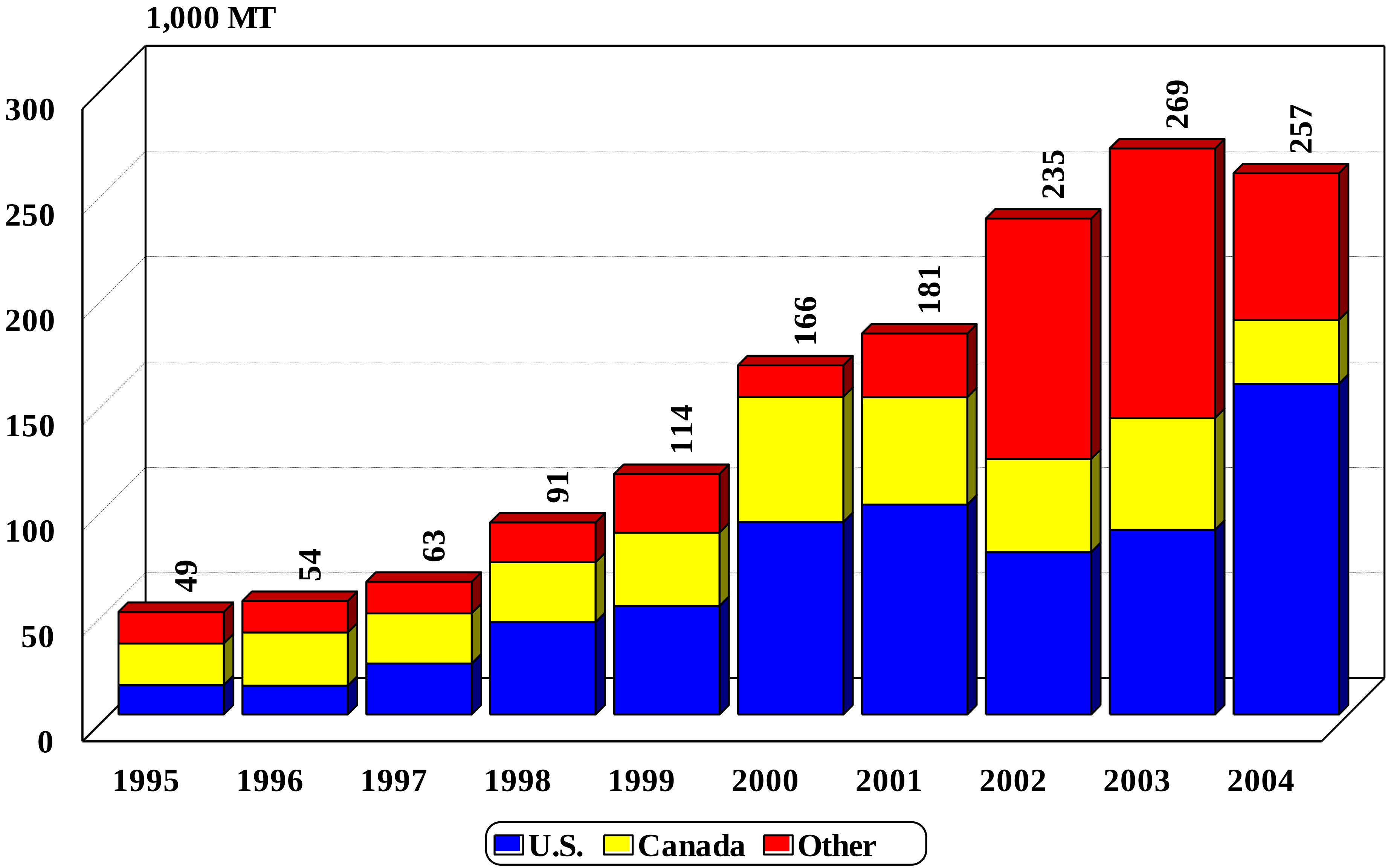
Source: U.S. Trade Internet System, www.fas.usda.gov/ustrade

Canadian Pork Exports



Source: Agriculture and Food Canada, USDA/FAS

Mexico Pork Imports



Source: FAS/USDA attache reports

Integration in the North American Swine and Pork Industry, 1989

Integration in the North American Swine and Pork Industry, 2004

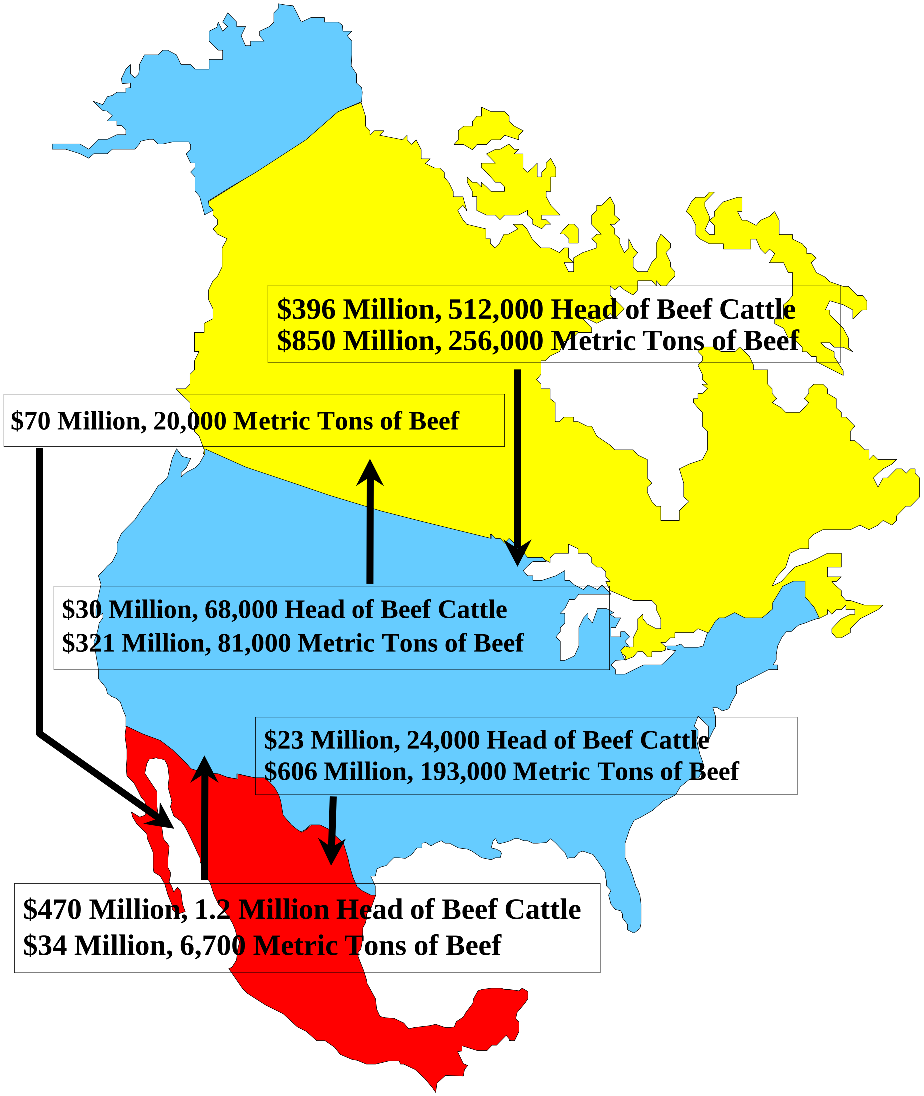
The North American Pork Supply Chain: Comments

- Decrease in Canadian Grain Transportation Subsidies Helped to Spur Local Animal Feeding
- Canadian Hog Slaughter Capacity Has Decreased, and While U.S. Capacity Has Decreased, U.S. Hog Production Has Decreased Even More
- U.S. Hog Producers Have Gone from Many Small, Farrow to Finish Operators to Fewer, More Specialized Operators
- Canadian Pig Production More Efficient than U.S., and Exchange Rate Favored Importing Canadian Hogs from ’96 – ‘02

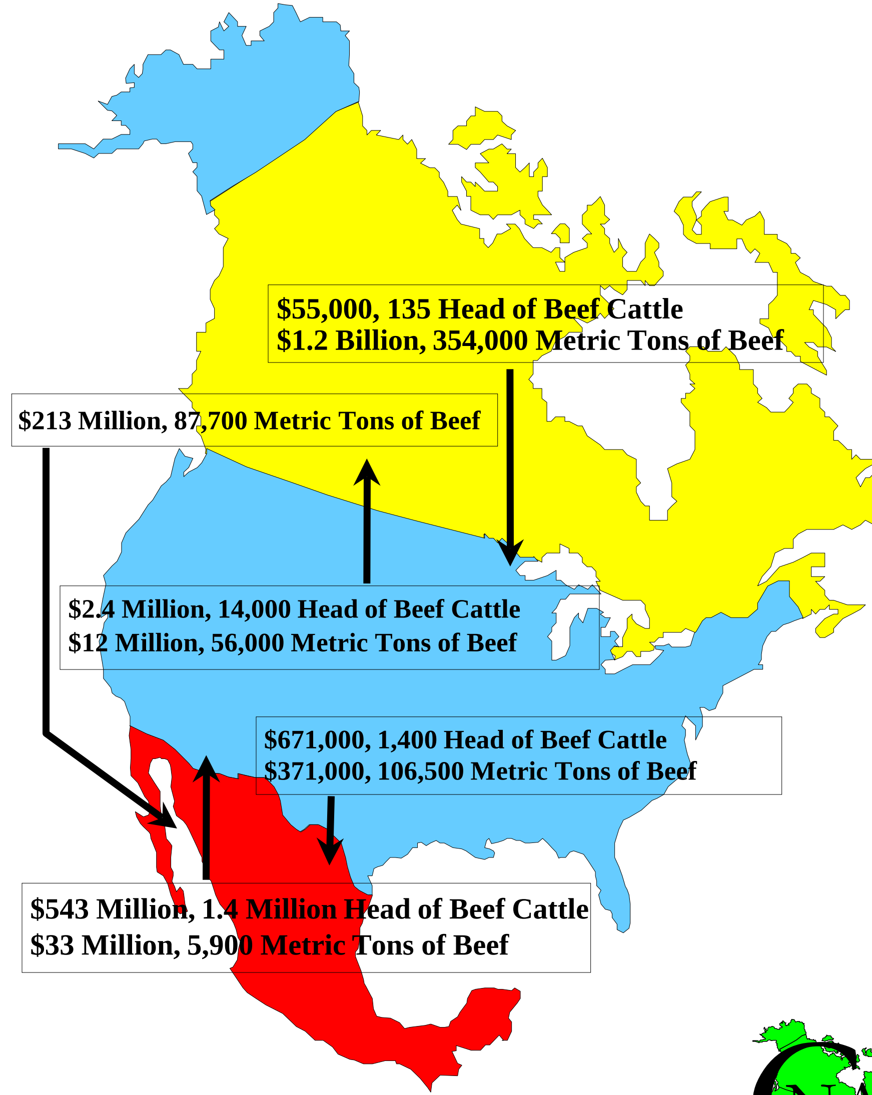
Potential Disruptions to N.A. Beef and Pork Supply Chain

- **Diseases Such as BSE, FMD Have Already Caused Disruptions**
- **Domestic Legislation, such as MCOOL and the Bioterrorism Act, Have Potential to Cause Disruptions**
- **Anti-Dumping/Countervailing Duty Cases Filed by All Three N.A. Countries Against Each Other Strain Relations and Could Disrupt Trade Flows**
- **Fluctuations in Exchange Rates Often Result in Temporary Changes in Advantages for Either U.S. or Canada/Mexico – and This Will Continue**

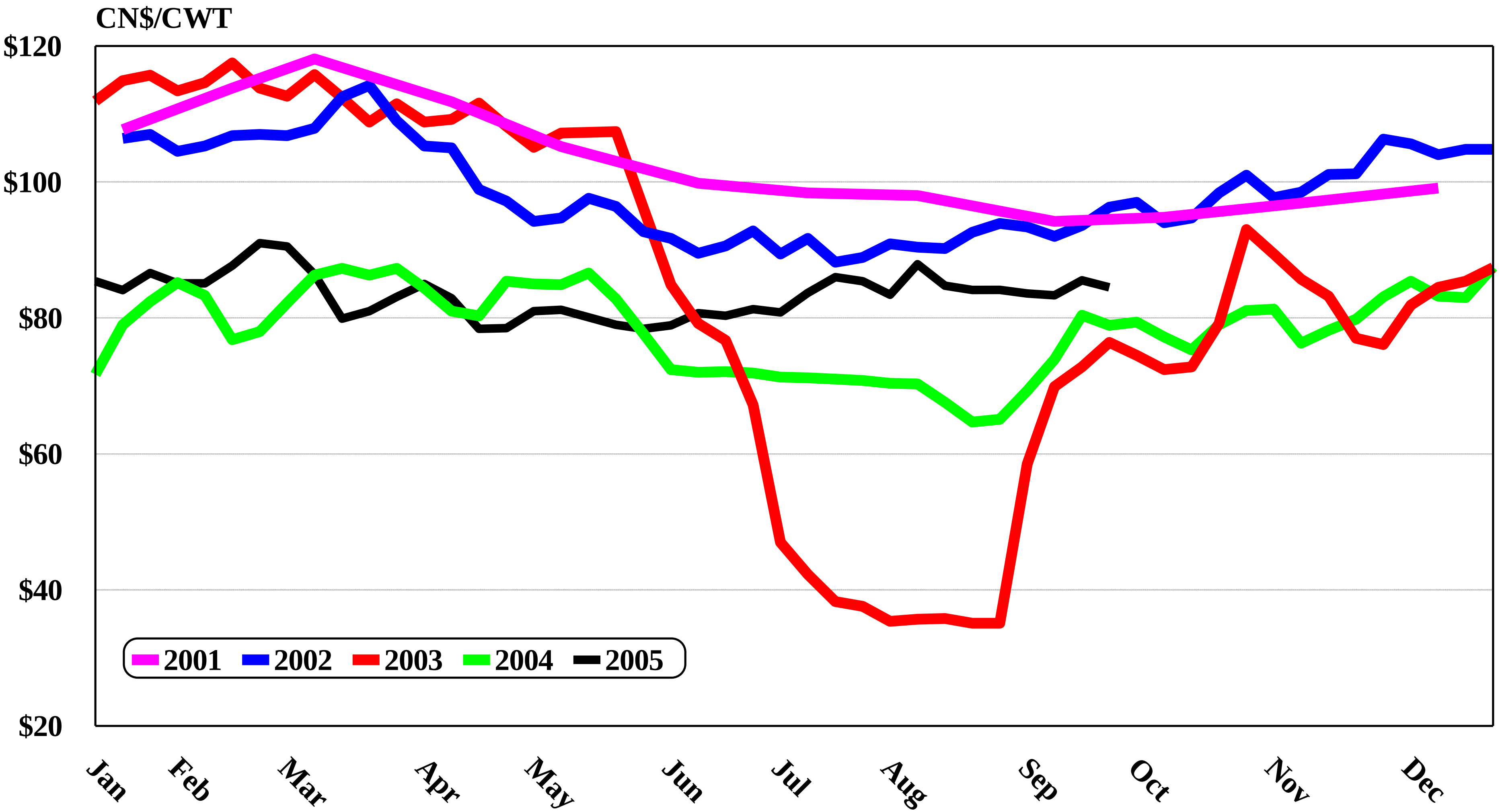
Integration in the North American Cattle and Beef Industry, 2003



Integration in the North American Cattle and Beef Industry, 2004



Alberta Direct Sale Steer Prices, Weekly Average, Jan 01 - Sep 05



Source: Alberta Agriculture, Food and Rural Development, www.agric.gov.ab.ca
2001 are monthly averages, source CANFAX, calculated by LMIC

Summary

- **North American Beef and Pork Industries are Integrated - Almost One Supply Chain**
- **Markets React Immediately to 'News,' But in U.S. has Recovered Quickly While Pain Lingered in Canada**
- **Unique Market Conditions Likely to Change**
- **U.S. Increased Cattle Imports from Mexico and Beef Imports from Canada (and Uruguay) to Help Meet Demand**
- **U.S. Pork Exports Have Gained As Beef & Poultry Exports Have Declined**

Implications

- **Degree of Trade Dependence Likely Continue Though Product Mix May Change**
- **Disruptions will Continue to Occur, But N.A. Supply Chain Too Entrenched to Change Much**
- **Maintaining Consumer Confidence is Crucial on Animal Health/Food Safety Issues**
- **Protectionist Response to Increase Trade to Continue**
- **Support for VCOOL Growing & Animal Identification May Be Necessary to Export**
- **Canada & Mexico May Seek Marketing Alternatives**

Primary References

- **Haley, Mildred. "U.S.-Canadian Hog Trade: Market Integration at Work."** ***Amber Waves*****. Economic Research Service, USDA, Volume 3, Issue 1, February 2005.**

- **Rosson, C. Parr, III and Flynn J. Adcock. "Food Chain Disruptions and Trade: The Importance of North American Market Integration."** ***Choices*****. 2nd Quarter, 2005, 20|2. On-line journal of the American Agricultural Economics Association, available at http://www.choicesmagazine.org, July 2005.**

- **U.S. Trade Internet System and Attache Reports, Foreign Agricultural Service, USDA, www.fas.usda.gov.**

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