

SHEEP & GOATS

Timeline of Events

1940's

- first reported case of scrapie in the US

1950's

- National Wool Act (1954) - Wool declared a strategic material. Act designed to increase production of wool resulting from the need during WWII and the Korean War to import half the wool required for military uniforms. Includes mohair, live lambs, and shorn wool
- Scrapie Eradication Program

1960's

- Wool removed from Pentagon's list of strategic material
- Long term downward trend in sheep inventories begun

1970's

- transgenics pioneered. Placing foreign sections of DNA into an embryo to produce an animal with a trait determined by the inserted code
- first of decades of surveys initiated to determine reason for declining sheep numbers

1980's

- goat cheese becoming popular - domestic production grows from nearly zero to 600 tons annually (80 tons more than is imported) within a decade ³
- BSE first reported in England
- "pharm" animals - genetic modification of sheep and goats to produce proteins of therapeutic value in their milk
- first cashmere goats imported

1990's

- Hello Dolly - cloned sheep
- BSE becomes an issue for food safety
- NAFTA - Mexico will eliminate tariffs on US exports of live sheep, mutton, and lamb
- National Wool Act phased out in part to appeal to public criticism of government spending; 1/3 payments go to Angora goat producers who export about 80% of their product, 1/2 payments go to top 1% of producers
- Voluntary Scrapie Flock Certification Program established
- sheep numbers small enough to be considered "minor species" by FDA (for all issues except food-safety). Easier to get approval for using drugs already

- approved for use in major species such as cattle
- underlying truism for all surveys regarding decline in sheep numbers: profitability is too low. Reasons vary - inefficient processing and lack of progressiveness leading to higher retail prices and lower farm-level prices ⁴ is one seemingly major one
- consumer surveys reflect that more people would buy lamb if it were in more convenient forms, and would try free lamb recipes if available - many consumers don't know how to prepare lamb ⁴
- Dairy goat business produces about 24,000 tons of goat milk annually, yet about half of the states have no specific goat milk health regulation ⁷
- First true meat goat imported (South African Boer). Dairy, Angora, and "Spanish" goats also used for meat - causes large diversity in production quality and carcass traits. Probably a serious impediment to orderly production and marketing. ⁶

Trends

- increasingly consumer driven market - uncertainty - lamb industry needs to focus on convenient, high quality, user friendly cuts.
- slow, but persistent increase in goat production (goats in Texas are increasing at a rate of 9%/year).¹ (*graph 1.40*) Since the majority of demand for goat meat comes mostly from the Hispanic and middle eastern ethnic groups, and since it is expected that these populations will grow in the U.S. in the coming years, the demand for goat meat will probably continue. ⁵
- decline in the sheep industry since WWII (mostly as a result of decline in consumer demand) may continue (*graph 1.39*)
- continued withdrawal of government from price supports to farmers
- potential for export challenged by increased competition with foreign countries which are scrapie free (*graph 1.41*)
- as agricultural lobbies become less powerful, politicians will respond more to environmentalists and recreationalists with regards to use of public lands (to graze or not?, to allow cheap leases or not?)

Uncertainties For The Future

Price

- competitive disadvantage of goat/sheep milk vs cow milk. Gourmet restaurants, and deli can demand higher price - effective marketing can increase this
- competitive disadvantage of lamb verses beef. High retail price, inconsistent quality
- increasing popularity of goat cheese; are consumers willing to pay the higher price of goat cheese

Health

- increasing awareness of healthier foods - goat milk has more protein and less cholesterol, and less saturated fat overall - has more “benign” saturated fat ³
- increasing awareness of milk allergies - may increase demand for goat milk
- “Pharm Animals”² - “four legged drug factories for use down on the farm” use as research animals - high-tech genetic research create transgenic animals for use in drug production. The question is: are the proteins secreted in the milk of these animals safe and effective in humans?
- Potential for export of seedstock - US has a diverse gene pool, but may have to compete with countries which are disease free. This will increase interest in certifying flocks to be disease free, ie unknown prevalence of Johnes Disease.
- public awareness of scrapie and their concern for potential zoonotic infection could further impact demand
- since the majority of dairy goat milk production is not for commercial purposes ⁶, how would Federal quality assurance programs (control of zoonotic infections) be implemented and controlled? How important might this market be in terms of disease control? Male kids from this industry would be sold to slaughter.

Other

- Use of sheep/goats for: noxious weed control - as restrictions on herbicide and pesticide use become stricter, range improvement - sheep reseed forest lands, and fire control since they eat chaparral and other undergrowth
- Will need to add value to products (ground lamb, and lamb trimmings), in order to increase demand for parts of the lamb that are under utilized and under valued.
- As consumers spend more time eating outside of home, fast food becomes increasingly important - lamb has not been on the menu. Potential for expansion of this industry with use of value added products such as ground lamb burger seasoned to taste like gyro sandwich.
- cloned animals - where will this go? Could this lead to a narrowing of genetic diversity with identical susceptibility to disease?

References

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