Swine Production

ASC 408G – Spring, 2009

Did You Know
(Unknown Facts About Swine)

- How Wall Street got its name
- How “Uncle Sam” came to represent the U.S. Government
- Heaviest hog ever recorded
- Highest known price ever paid for a hog
- What President Harry Truman said about hogs
- Origin of “pork barrel politics”
- Longest single sausage ever made
- Origin of the word “barbecue”

Popular Vernacular Involving Swine

- Gone hog wild
- Goin’ whole hog
- Livin’ high on the hog
- Hog-tied
- Pork barrel politics
- A pig in a poke
- Being pig-headed
- Piggin’ out
- Hammin’ it up
- Bringing home the bacon
- A bunch of hogwash

Sus scrofa

Why do we produce pigs?

- As a hobby?
  No
- To make a profitable income?
  Yes
- To produce food?
  Yes
  Pork is the most widely consumed meat in the world
  Important source of protein for humans
  Excellent source of minerals and vitamins
  Especially rich in B-complex vitamins (thiamin, B12)
Meat Consumption in the World

- Pork: 42%
- Beef: 24%
- Poultry: 28%
- Lamb/Goat: 6%

Other Contributions of Pigs to Society

- Medical products
  - Source of over 40 drugs and pharmaceuticals used in human medicine – insulin, blood fibrin, heparin, etc.
  - Heart valves for humans
  - Skin for burn patients
  - Model for biomedical research
  - Physiologically, pigs are more like humans than any other animal.

- Industrial products – pigskin, paint brushes, animal feed and pet food ingredients (meat and bone meal, fat), etc.

Facts about Pigs and Pork

- There are 180 species of pigs.
- Pigs are found on every continent and nearly every country of the world (exception: Antarctica).
- 1 billion pigs in the world.
- 6 billion people
- So 1 pig for every 6 humans.
- Pork is the most widely consumed meat in the world.
- Pigs are the 4th most intelligent of all animal species.
- Pigs are the most intelligent of all farm animals and household pets (including horses, dogs, cats)

Pigs in the World

- Where are they located?
- Which continent of the world has the most pigs?
- Which country has the most pigs?
Top Pork Producing Countries in the World

- China: 42%
- USA: 8%
- EU: 16%
- Brazil: 2%
- Rest of World: 32%

U.S. Pig Population

- Approximately 100 million pigs are produced annually in the U.S.
- Most of them are produced in the upper midwest.

Why are most of the pigs produced in the upper Midwest?

- Major grain and soybean producing area.
- Corn accounts for 85% of the total grain production in the USA.
- Corn represents 90% of all feed grains fed to swine.
- Soybean meal represents 90% of all protein sources fed to swine.
- Pigs and corn go hand-in-hand.
- Exception – North Carolina
  - Large corporate farms, highly integrated.
  - Corn shipped to NC from midwest.

Top 8 States in Pig Production (2008)

1. Iowa: 28%
2. North Carolina: 15%
3. Minnesota: 11%
4. Illinois: 7%
5. Indiana: 5%
6. Nebraska: 5%
7. Missouri: 4%
8. Oklahoma: 4%
20. Kentucky: 0.5%

U.S. Hogs and Pigs Inventory (1997)

No. of Swine Operations in U.S. (1965 to 2004)
Number and Size of Swine Operations in the USA - Past 30 Years

- Number of operations dropped 10-fold, from 647,000 to 69,400 hog farms.
- Size of hog farms has increased 10-fold, from 87 head per farm to 871 head per farm.

Changes in the Swine Industry - Past 30 years (No. of hog farms in the USA)

Who Produces the Pork in the U.S.?

Independent producers
Small farms
Medium sized farms
Large farms
Corporate farms - Integrators

Megaproducers of Pork

- Corporations - highly integrated
- Many own their own feed companies and pork processing plants
- Examples:
  - Smithfield Foods – 1 ¼ million sows
  - Triumph Foods – ½ million sows
  - Seaboard Foods – ¼ million sows
  - Iowa Select Farms, Prestage Farms, Pipestone, The Maschhoffs, Cargill, Tyson Foods, Hormel Foods, etc.

Who Produces the Pork in the U.S.?

<table>
<thead>
<tr>
<th>No. Hogs Marketed/Yr</th>
<th>No. Farms</th>
<th>% of Farms</th>
<th>Market Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1,000 (&lt;50 sows)</td>
<td>59,950</td>
<td>85.5%</td>
<td>1%</td>
</tr>
<tr>
<td>1,000-2,999</td>
<td>6,630</td>
<td>9.5%</td>
<td>8%</td>
</tr>
<tr>
<td>3,000-4,999</td>
<td>950</td>
<td>1.4%</td>
<td>4%</td>
</tr>
<tr>
<td>5,000-9,999</td>
<td>1,526</td>
<td>2.2%</td>
<td>9%</td>
</tr>
<tr>
<td>10,000-499,999</td>
<td>1,049</td>
<td>1.5%</td>
<td>38%</td>
</tr>
<tr>
<td>&gt;500,000 (&gt;25,000 sows)</td>
<td>25</td>
<td>.04%</td>
<td>40%</td>
</tr>
</tbody>
</table>
Swine Production in Kentucky

- Mostly in Western half of the state.
- Top five counties
  1. Nelson
  2. Allen
  3. Union
  4. Hopkins
  5. Mclean

Farm Receipts in Kentucky 2006

<table>
<thead>
<tr>
<th>Million Dollars</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Livestock</td>
<td>$2,708</td>
</tr>
<tr>
<td>Horses</td>
<td>$1,110</td>
</tr>
<tr>
<td>Poultry and eggs</td>
<td>$710</td>
</tr>
<tr>
<td>Cattle and calves</td>
<td>$608</td>
</tr>
<tr>
<td>Dairy products</td>
<td>$179</td>
</tr>
<tr>
<td>Hogs</td>
<td>$90</td>
</tr>
<tr>
<td>Crops</td>
<td>$1,299</td>
</tr>
</tbody>
</table>

Livestock Receipts in Kentucky - 2006

- Horses 41%
- Poultry 26%
- Cattle & Calves 23%
- Dairy Products 7%
- Hogs 3%
- Crop Receipts in Kentucky - 2006

- Tobacco 25%
- Other 2.7%
- Corn 26%
- Soybeans 25%
- Wheat & Hay 15%

Pork Consumption in the USA
**Pork Consumption**

- The most widely consumed meat in the world.
- Per capita consumption in world = 29 lb carcass wt.
- Per capita consumption in USA = 67 lb carcass wt. (~50 lb retail wt.; ~46 lb boneless wt.)
- Trend has remained stable over past 50 years.
- Population has increased, so total pork consumption has increased.

**U.S. Per Capita Pork Consumption, 1930-2006**

**U.S. Per Capita Meat Consumption Boneless Equivalent**

- Most pork is consumed domestically (90%).
- Some exported (10%).
- Purchased and consumed as:
  - Fresh pork – loin roasts and chops
  - Cured pork – hams, bacon
  - Processed meats – weiners, lunch meat, etc.
  - Fast food restaurants
    - Pizza
    - Sausage, pepperoni
    - McDonalds, Burger King, Wendy’s
    - Breakfast meats - sausage, bacon, ham, etc.

**Opportunities for Swine Production in Kentucky**

- Agricultural state - > 50% of land mass is agriculture
- Availability of grain
  - Close to corn belt
  - Produce plenty of corn - export some of it
  - Grain moves easily - waterways for barge traffic
- Good markets – packing plants
  - Louisville; Cincinnati, OH; Logansport, IN
  - Numerous small packing plants in Kentucky
- Close to major population areas
- Good climate
- People – more than half of the population is rural