

SKAGIT AGRICULTURE



- ◆ People
- ◆ Wildlife
- ◆ Issues

*WSU/Skagit County Master Gardener
Tulip Tour Guide Training
March 12, 2007*

Farmers & the products they produce (mostly crops).

Why farmland is so important to the critters we have here.

Key issues: Many huge, most of which I've been involved at some level.



Skagit is one of the few place in the world where tulips are grown.

400,000 for Tulip Festival. Yet, no make connection.

That's a farm out there, not a display garden.

One of the reasons I've increased focus of my programs toward educating the public about ag and how it enhances our quality of life.



Make the connection: Tulip fields are here because agriculture is strong.

Lost 300 acres (LeFeber & Gardner), but WA Bulb still going strong.

**“It’s Not Farmland
Without Farmers”**



Farming is a business. Like other businesses, owners must make a profit.



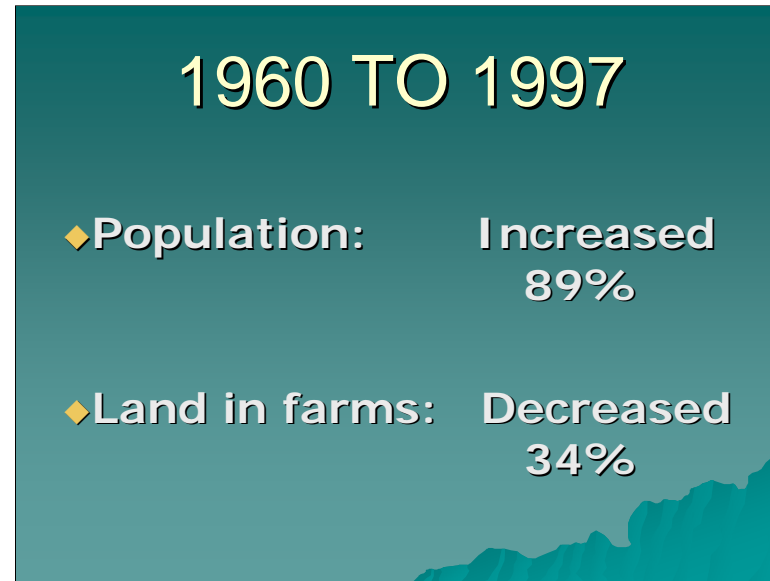
**Bumper sticker available at Farmland Legacy
(360.336.9365)**



Lost 300 acres tulip & daff (LeFeber & Gardner). If the economics are not there, the farmer must change. Many times, that means they must sell their land. This has potential for affecting you and me and our quality of life.

| Year | Land in Farms | Avg. Size |
|------|---------------|-----------|
| 1900 | 87,151 | 98 |
| 1940 | 152,758 | 47 |
| 1982 | 109,934 | 112 |
| 1987 | 95,357 | 118 |
| 1992 | 92,074 | 122 |
| 1997 | 93,495 | 131 |
| 2002 | 113,821 | 131 |

2002 Federal Ag Census method changed. Can't compare with previous years--numbers inflated.



Population predicted to grow another 50% by 2020. Urban pressures increase as homes are built next to farms. Increasing number of calls: I just bought a house next to a farm: What do farmers spray? Noise: gunshot sound for birds. Smells: dairy manure.



But virtually no one complains about all the open space and green plants they have to look at west of I-5.



Nor do they complain about the 4,000 swans that hang out in the valley due to the presence of farms. In winter, we have the largest concentrations of Trumpeter swans in the U.S. (tundras also here in good numbers)



Nor do they complain because it's too dang quiet when they take their walks or ride their bikes out on the farm roads.

CROPS IN 1930

- ◆ Corn
- ◆ Wheat
- ◆ Oats
- ◆ Barley
- ◆ Rye
- ◆ Sugar beets
- ◆ Potatoes
- ◆ Hay, sorghum
- ◆ Animals
- ◆ Orchards

Give you a bird's eye view of ag in Skagit. Bring in the issues, the people, as we go.

Back in the earlier part of the century, these crops.

Oats big to feeder

Model T's no eat oats, so crops changed.

TODAY

- ◆ 8 berries
- ◆ 3 tree fruits
- ◆ 28 vegetables
- ◆ 25 seed crops
- ◆ 5 flowers & bulbs
- ◆ 5 small grain
- ◆ 3 forage
- ◆ Bamboo, tea hybrid poplar, Christmas trees

Today's mix.

➤90 different crops
872 farms
\$255 million farmgate value



Recognize Steve Sakuma. One of leaders working to keep ag alive here. Very diverse.

Farmgate \$255. But if add other values (retail value, jobs, bird watching, agritourism) = half a Billion.

Vegetable Seed

- 50% World's Beet and 30% Spinach
- 70%+ World's Swiss Chard, Kale Mustard, Chinese Cabbage, Brussels Sprouts
- 50% Nation's Cabbage



7 seed companies, purchase seed from growers. One of our niche crops. Sell seed all over the world. Unique marine climate—great for cool-season crops (Brassicas)

“Competitive disadvantage. Costs to produce here higher.

HANDOUT: Skagit 3,149 ac 1993 to now 700.

Which
crops?



Cabbage: hybrid with stakes. Transplant mid-Aug to mid-Sept, bloom begins early May, harvest July-Sept.

Beets: major world producer.. Companies grow bulbs to be sold to farmers on Whidbey. “Trench” them. Dig up in April and brought over to farmers to plant.

Floods, Freezing Temps



Cabbage: Lose crop one out of 5 years. Farmer's weather attitude: win some lose some. No real grousing.



What crop?

Denmark. Skagit 3,149 ac 1993 to 790 ten years later Spinach: 2 diff var's, both contain male & female plants. One chosen for female (8 rows) other for male (4 rows). Within the female variety, males are rogued to prevent self- pollination. After pollen is thrown, var. chosen for males disked under so no more pollen thrown.



Yellow blossoms: mustard, Chinese cabbage, turnip, rutabaga.

Skagit Vegetable Seed

- ◆ 3,000 to 4,000 acres
- ◆ \$5 million to \$7 million

| | |
|---|--------------|
| Between cabbage types | ½ to 2 miles |
| Between cabbage and: kale, kohlrabi, Brussels sprout, broccoli, cauliflower, collard | 3-5 miles |
| Between smooth leaf and savoy leaf spinach | ½ to 2 miles |
| Between white ribbed Swiss chard and Rhubarb chard | 5 miles |

Challenge: isolation. Keep reputation as one of premier regions in world. 5,000 acre max due to isolation requirements.

Cabbage types in groups: Early Pointed, Late Pointed, Flat, Red, Green, Savoy.



Wind row. Similar to alfalfa.

Screen cages. “Nicking” trials (try different female varieties with different male varieties—timing of pollen throw) If male throw early and female not receptive—like birds, animals, it “ain’t gonna happen.”

PROCESSING CROPS


- ◆ 1965: 8 local processors serving Skagit crops



- ◆ Today: 2 (Twin City Foods and Sakuma Bros.)



Processor contracts with a farmer to grow a certain number of acres of a specific crop. Crop is frozen. Sakuma: IQF tunnel. (type of “value added) –double or triple the value.




- ◆ 2000: 800 acres
- ◆ 2001: 0
- ◆ National Frozen Foods closed
- ◆ 1996: 1,026 acres
- ◆ 1997: 0
- ◆ Dean Foods closed

Carrot: Some growers growing in E. WA

Corn: 1,000 ac fresh corn (roadside)

**Corn maze may earn farmer more than crop.
(Agritourism)**



◆ Green peas

- ◆ 1968: 32,000 Ac
- ◆ 1990: 14,800 Ac
- ◆ 2002: 4,196 Ac

**NFF shut down
6,000 Ac gone**

What to grow instead?

Small Fruits



Raspberries: 99% processing

Strawberries: 95% processing

Blueberries: 50% processing



93% of U.S. red raspberry production in WA, most of that in Whatcom/Skagit. 99% processing

Wild price fluctuations: (38 cents to 79 cents) = \$2,460/acre difference = \$24,600/100 acres.

Acreage fluctuates also

Issue: Labor



- ◆ Minimum wage in WA highest in nation
- ◆ Child labor laws
- ◆ Timing
- ◆ Paperwork (regulations)
- ◆ Forced to mechanize
- ◆ Housing

Competitive disadvantage

Laws to guard against abuse. Family values (always 2 sides) Housing – Camps. Purchase rentals (hard to find)

House with moat in background. 40 acre minimums. Back taxes 7 years.



Global and national competition – acreage down in OR & WA. 95% processing.

Our advantage (processing): even color, nice red.

Buy green strawberries add red food coloring.


Fresh advantage: taste

◆ Potatoes

1984: 2,010
2003: 13,000

95% of WA reds

Phytophthora infestans



18 growers. Skagit grows 95% of reds in state.

Fear: Others will figure it out. Need options

Potato chips: Round potatoes (if cutter off, still good shape)

Late blight: 1 out of 8 Irish persons died of starvation in 3 years around 1845. Thousands more went blind or insane for lack of vitamins potatoes provided. Within 1 decade, Ireland's population declined by 50%. Circumstances different, but shows how devastating and fast-spreading a crop disease can be if not controlled.

Now our growers use multiple IPM tactics to control *Phytophthora infestans*. Primarily due to research by Debbie Inglis.

Grow 7% of state's acreage, but get 14% of the farm gate value


◆ Pumpkins

1988: 90
2001: 240



Pumpkins on the increase. Example of value added.

- ◆ Broccoli
- ◆ Cauliflower
 - 1988: 1,783
 - 1992: 360
- ◆ Squash

A photograph showing a cauliflower field. In the foreground, several workers are visible, some standing and some working. A tractor is also present in the field. The background shows a clear sky and a distant horizon.

Cauliflower: Lost processor in 1989. Now all fresh, 2 farms.

Pickling cukes

ISSUES:

Urbanization

Regulations

Mechanization

Keeping
processor



Mechanization: Harvest all at once so lose size advantage

Musical companies: Now Dean Foods

Acreage stable: 2,000 – 3,000

County Ag Advisory Board formed January 2003.

◆ Apples

1992: \$280

2000: \$70



There are 20 40-lb boxes per bin, 40 bins per acre.

Issue: Lack of control of price

We grow just 1/60th of state's acreage.

Skagit acreage tripled 1985-1989. 415 ac in 1999.

Now growers removing trees. 300 acres 2002.

| | 1990 | 2000 |
|-------|-----------------------|--------------|
| China | 4 million metric tons | 22 MT |
| US | 4 million MT | 4 million MT |

China has 10 times acreage of WA (top state in US)

China starting to get infrastructure, methods of transport.

Jonagold

Merritt 10 acre organic (value added)

Miscellaneous Crops

- ◆ Artichokes
- ◆ Tea
- ◆ Pears
- ◆ Blackberries
- ◆ Greenhouse tomatoes
- ◆ Leeks
- ◆ Hybrid poplar
- ◆ Christmas trees
- ◆ Nursery

Pear: 'Taylor's Gold'

Blackberries, late blueberries (Elliott) under cover.

Poplar: No market

Christmas trees: Market good now, bad 9 years ago.

Nursery stock (Sue Christianson)

Dairy & Livestock



Prediction of huge no. of closures in dairy in next few years. 125 dairies ten years ago. 50 in 2003.

Major dairyman on verge of bankruptcy, moved toward selling value-added products off his farm. Example of survival mechanism.

Organic

- ◆ 1,300 acres
- ◆ 16 growers
- ◆ New standards:
 - "100% organic"
 - "Organic"
 - "Use of "Organic Ingredients"
 - Seed: Organic required

Issues/Challenges

- ◆ Buffers (regulation)
- ◆ ESA
- ◆ Tidegates
- ◆ Conversion of farmland
- ◆ Loss of pesticides
- ◆ Farm Succession
- ◆ Weather

Buffers: Count the hatchery fish or not? Recent decision YES. Buffers gone, but continuing lawsuits. 19 lawsuits against the County by the Swinomish tribe. 2 lawsuits by the County against the tribe (marina project off Swinomish Slough).

Buffers vs. Habitat



While farmlands provide habitat for thousands of wildlife individuals, salmon recovery is also a huge issue. Farmers argue that if the valley were in houses, no chance for salmon.

GMA passed. CAO a part of: Ag must show they are not harming salmon.

Yet, ag is also a protected resource.

“Big Dumb Buffer” = making rule without science that shows it’s effective.

“70% of wildlife depends on farmland for some part of their life cycle”



The eaters.

The Eaters



Inevitable eaters. Feed on small mammals, dabbling ducks, great blue herons, all of which use farmland as habitat.

Largest wintering population of eagles in the lower 48 states. 579 eagles counted from S.W. to Newhalem along Skagit River 2001.

ISSUE: Tidegates & drainage



Farmers taking hundreds of people: Legislators, governor, agency heads, environmentalists on tours.

Conversion of Farmland

"In U.S.: Losing 2 acres of mostly prime farmland per minute to development—the fastest decline in US history."

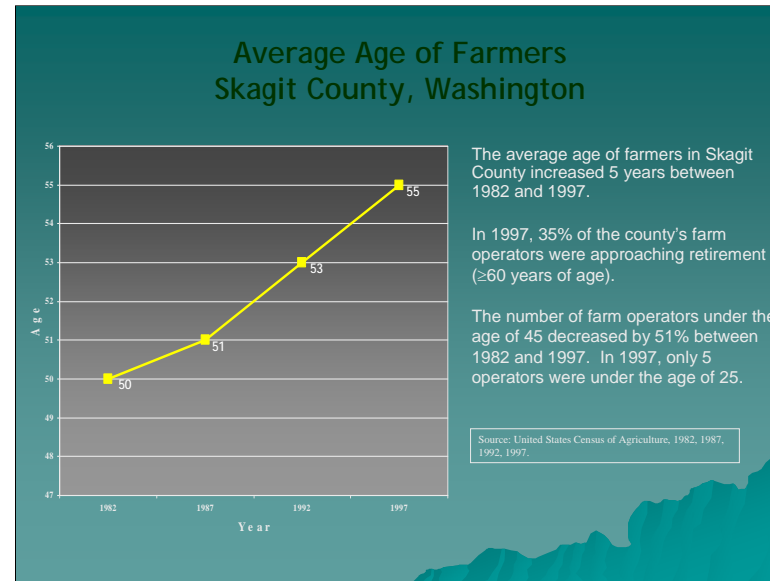
American Farmland Trust (2002)

Loss of Pesticides

- ◆ Tools in the toolbox
- ◆ Late blight example
- ◆ Farmers: license required
- ◆ DOE study: urban pesticides are bigger problem

Urban pesticides coming off of residential areas causing more pollution than farm pesticides (Dept of Ecology Study)

Farmers: Testing & licensing required (not for homeowners)



Handing over the Farm

Little incentive for kids to take over the farm.

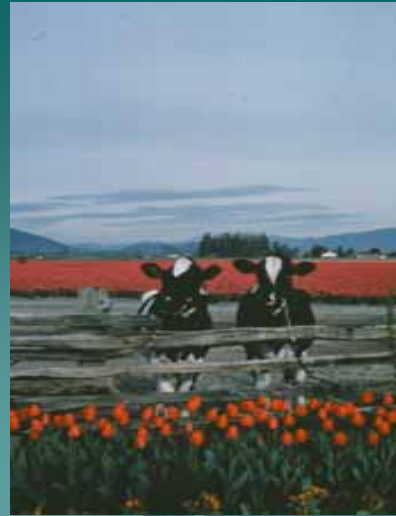
Weather



A factor with any farm.

The Future

*Doing
things
just a
little
differently*



Adapting to Changes

Value Added



Value added.

Youngquist: raspberry frambois

Wechsler: Organic cheese

Challenger Ridge: Wine

Changing practices



**Potato growers started feeder calf operation.
New crops.**

Vertical Integration



**Plant, harvest, process, market the berries or cukes
(local pickles, sauerkraut).**

Puts more \$\$ back into the farmer's pocket.

Forming Alliances

- ◆ WSU Skagit County Extension
 - Ag Leaders Group
 - Young Farmers
- ◆ Western Washington Agricultural Assn.
- ◆ Skagit County Agricultural Advisory Board
- ◆ Tribal Ag Summit
- ◆ Skagitonians to Preserve Farmland
- ◆ Friends of Skagit County

- ◆ Farmers joining forces

Spuds: One grower has the land, other has the money, other has the know-how.

Marketing Direct



Farmstands and farmers markets becoming very popular.

Agritourism



Festival of Family Farms: 26,000 visitors since 1999

46% changed food buying habits.

62% more local products, 285 more organic

Educating the Public
Cultivating Success



Buffer/tidegate tours

Festival of Family Farms
October 1 & 2



“Buy Local”



Average food item found on dinner plate travels 1500 miles before it reaches your plate.

Know where your food comes from (BSE)

Freshness

Quality

Support local farmers and economy

Enticing the Youth



























