

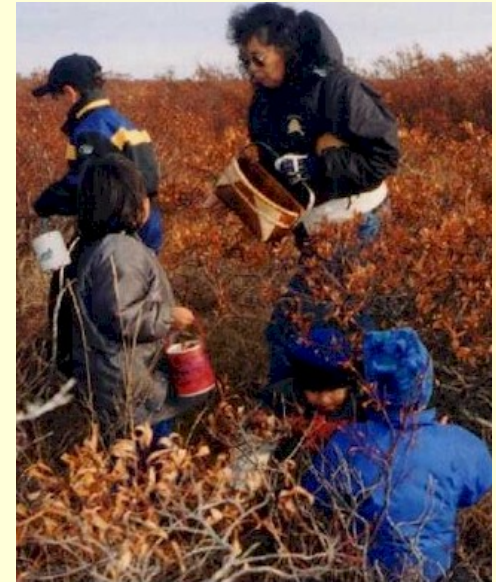


Alaska's Wild Berry Resources

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Traditional uses of wild berries

- Harvesting enough for yourself, family, neighbors
- Sharing wild berries as food, medicines, natural dyes with family, community
- Bartering

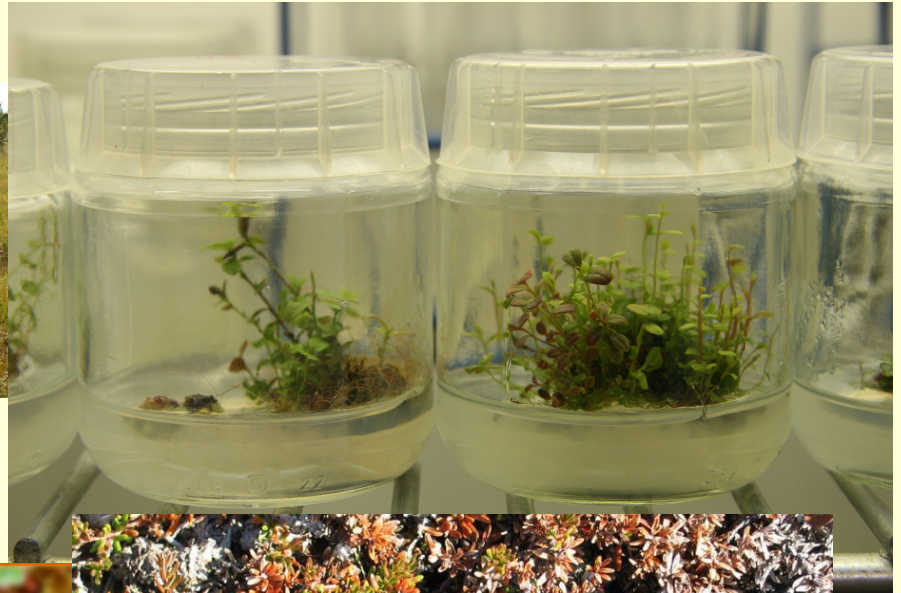


These traditions have evolved into:



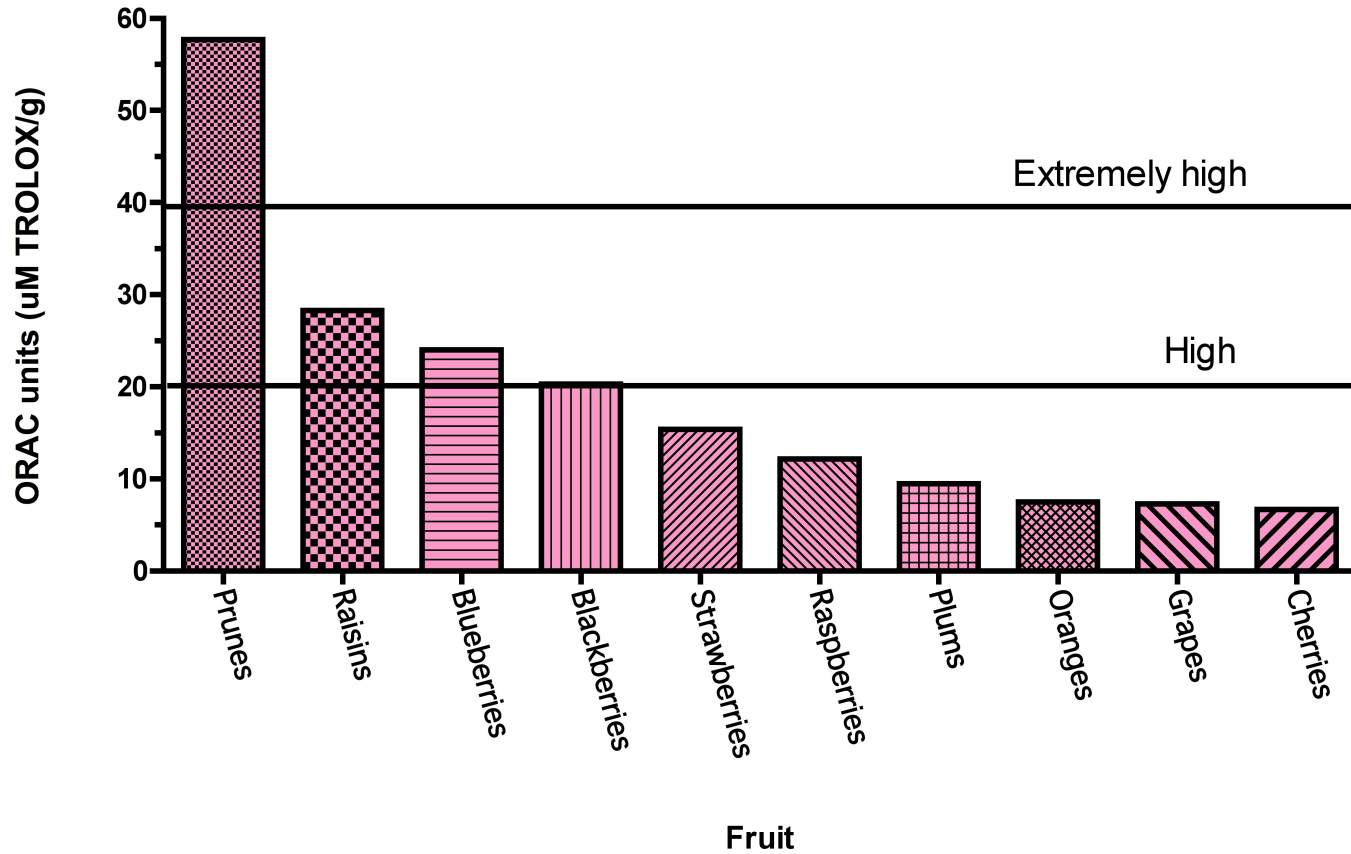
- Small home-based family businesses
- Community businesses with employees
 - Part time, retired, seasonal
- Large companies - many employees, retail locations

UAF Research

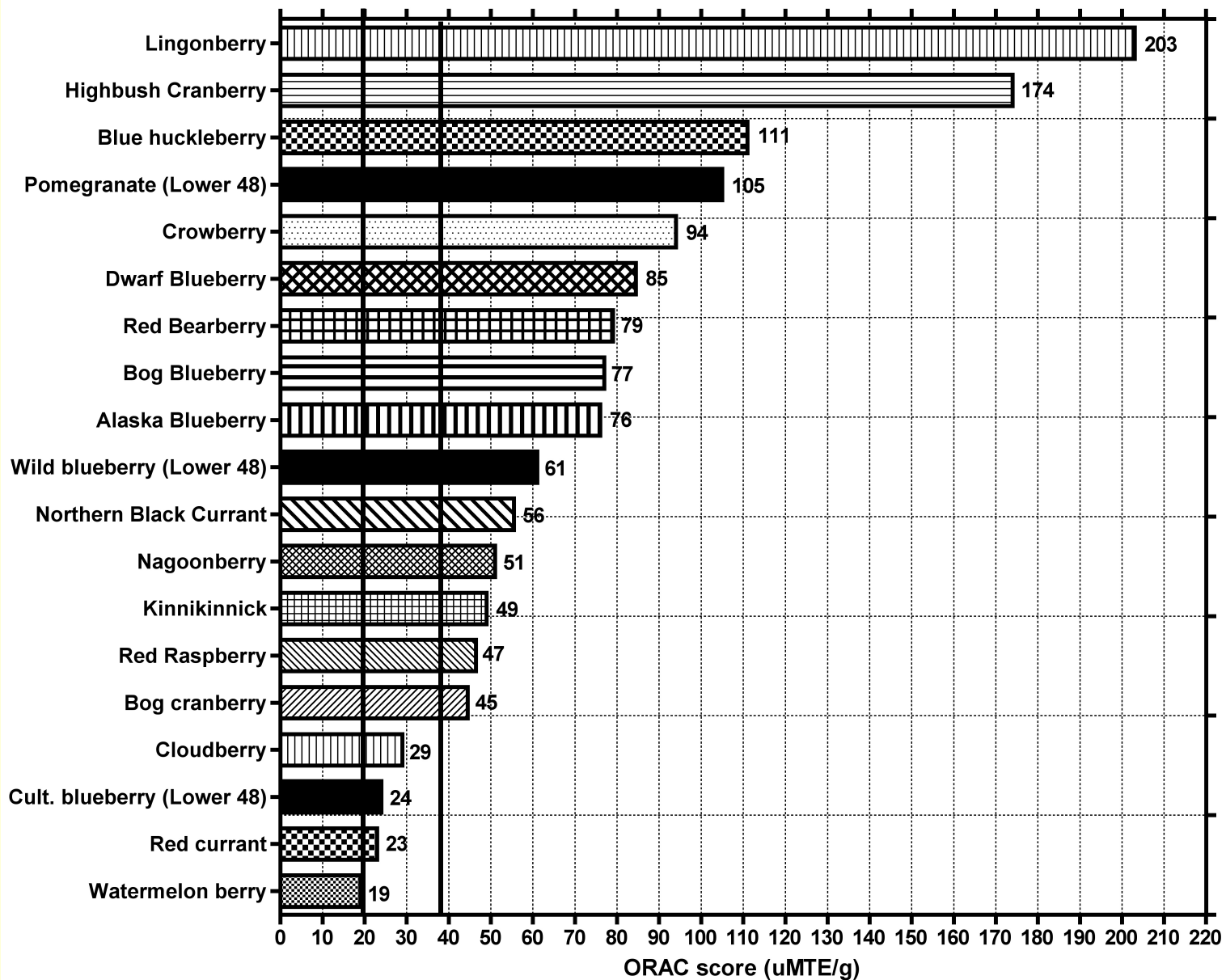


Antioxidant Revolution

ORAC Score for Commercial Fruit



ORAC = oxygen radical absorptance capacity
total amount of antioxidants, beneficial or not, per gram



Antioxidants in Alaska wild berries compared to commercial fruit (in black)

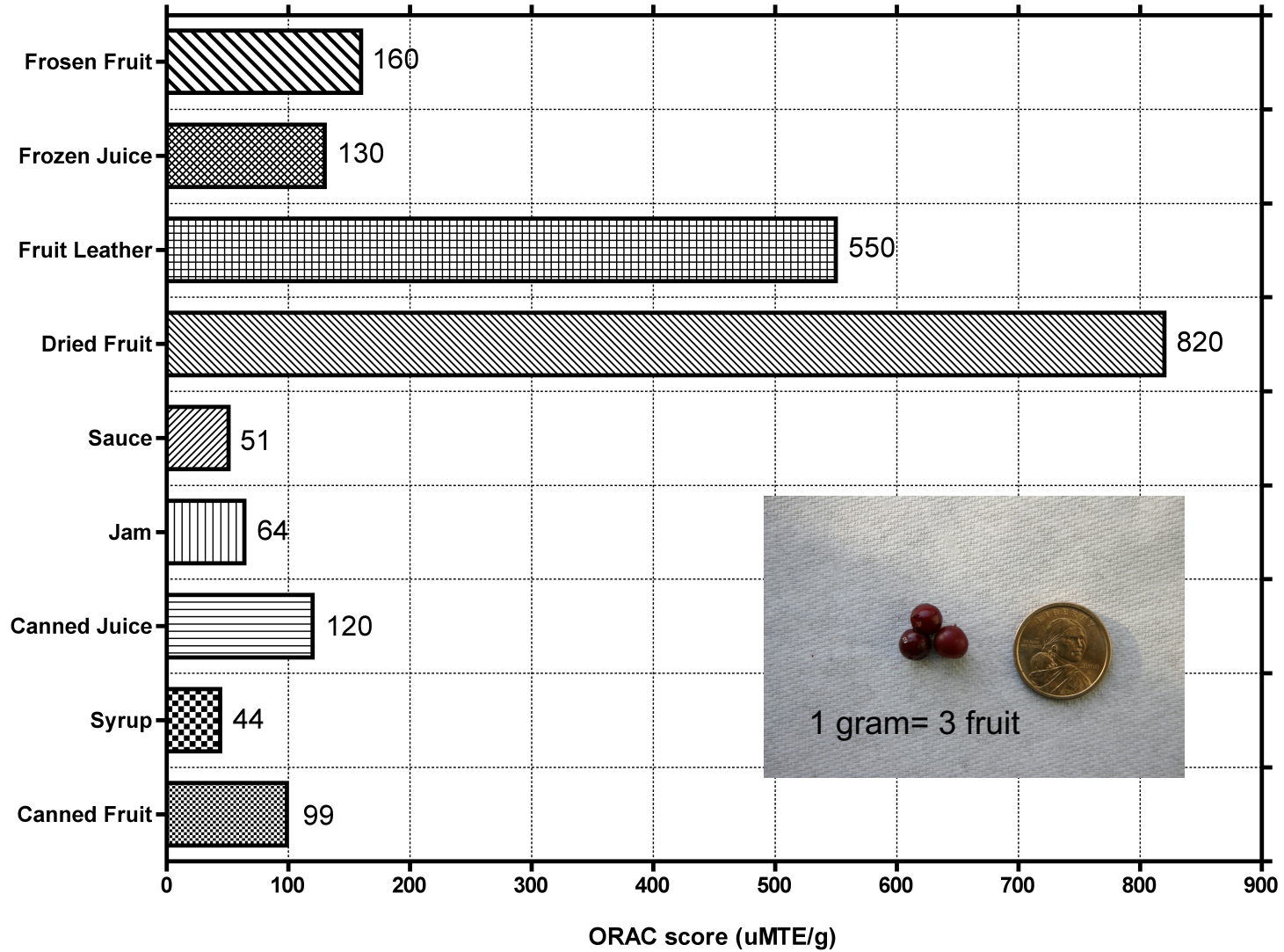
What happens when you process the fruit?

UAF Cooperative Extension Service

- Jams
 - Freezer jam
 - Sauce
 - Leather
 - Canned fruit
 - Frozen berries
(control)
- Syrup
 - Jelly
 - Juice
 - Dried

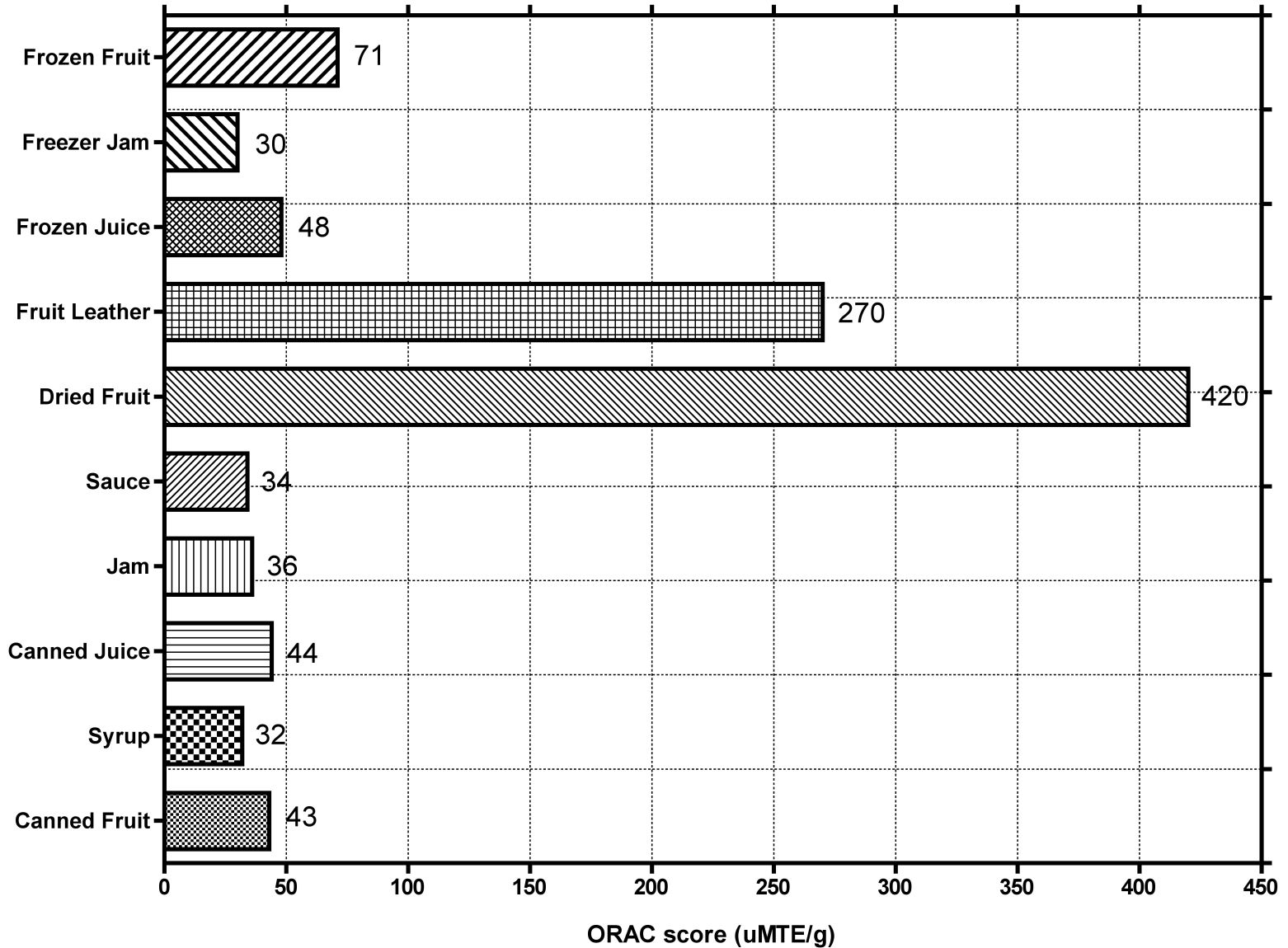


ORAC Score for frozen and processed lingonberries



Water soluble antioxidant capacity per gram sample

ORAC score for frozen and processed bog blueberries



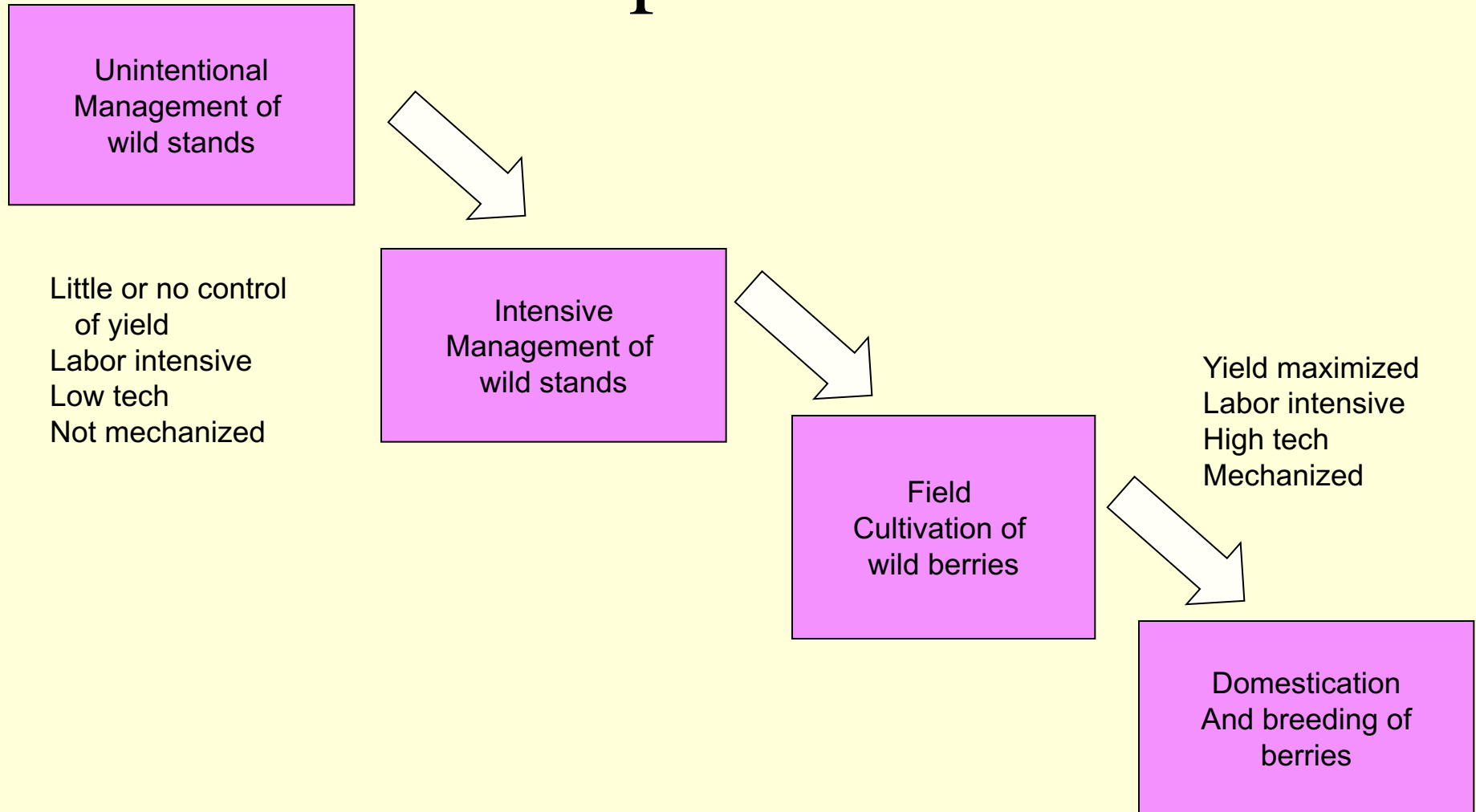
Water soluble antioxidant capacity per gram sample

Wild Berry Harvesting

- Boom and bust years
- Remote locations
- Lack of labor for berry picking



Methods of managing berries for fruit production



Unintentional management

- Making pathways, roads into berry stands
- Removing stumps in a favorite pathway
- Breaking off branches while harvesting (pruning!)
- Removing berries from branches
- Adding human “nutrients” to soil



www.insidepassage.com

www.climatechangenorth.ca

Intensive Management of Wild stands



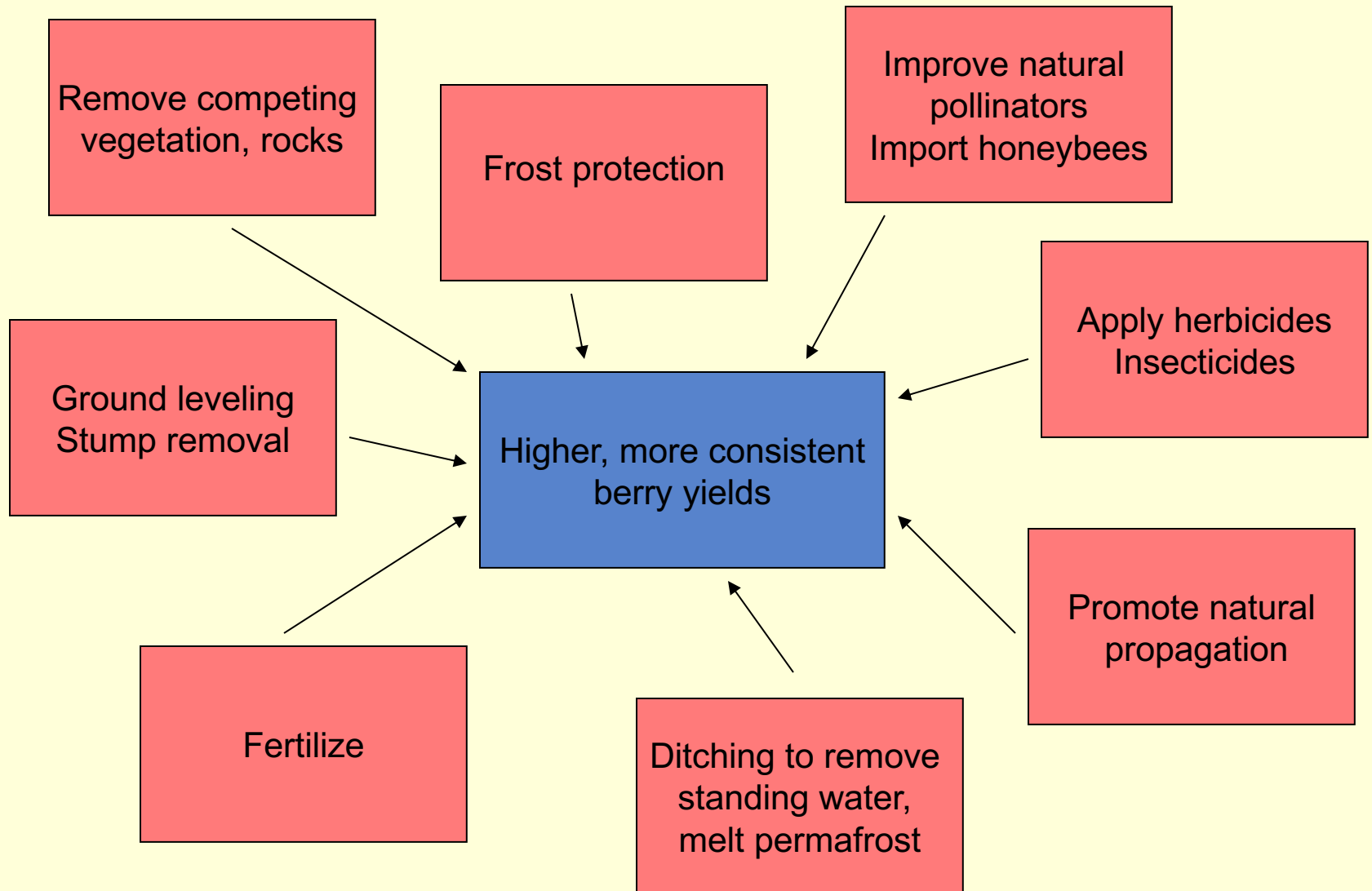
East Coast wild blueberry industry

60,000 acres
\$75 million industry



Univ. Maine, with permission

Intensive Management of Wild stands



Learn about and observe the plant

- When does it flower?
- What are the insect pollinators? How do they live?
- Are there more berries on dry hillsides or bogs?
- What are the stages of fruit ripening?
- Any diseases? Insect pests?



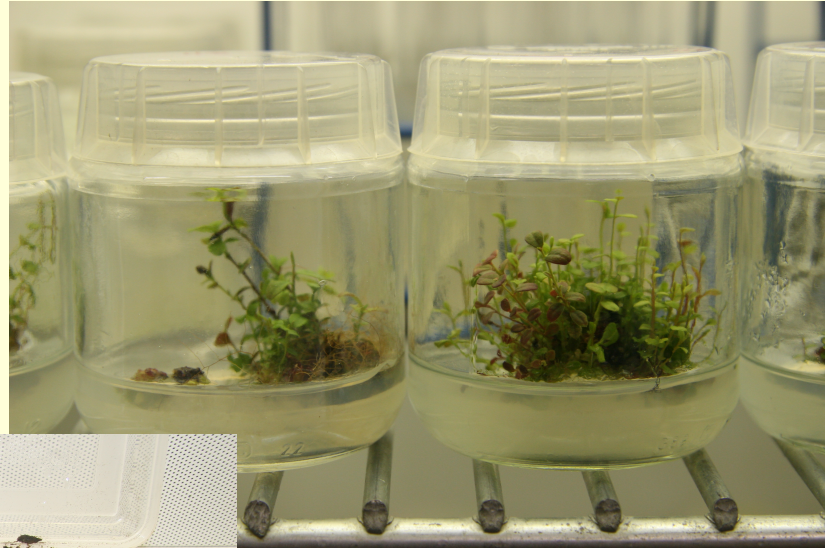
Field Cultivation of Wild berries



- Fields prepared for agricultural crop
- Plantings in rows
- Irrigation, fertilizer, frost control, mechanical harvesting

Propagate quantities of plants

- Stem cuttings
- Root Cuttings
- Tissue culture



Genetic improvement for better fruit production

- Cloudberry
 - Norway, Sweden
- Lingonberry
 - Poland, Russia, Sweden, Germany
- Bog Blueberry
 - Russia
- Nagoonberry
 - Sweden



Erntesege



Sana



Balsgard

