



Alaska Greenhouse and the Challenge to Eat Local

Red Edge Design



Urban Homesteads for Modern Living

Energy Ratings
Workshops
Consultations
Designs

Matt Oster
And
Saskia Esslinger
Rededgealaska.com
907.563.1119





Goals and Assessment

Goals

Primary function

Other functions

Durability

Resources

Maintenance/ Construction/ Time

Money

Materials

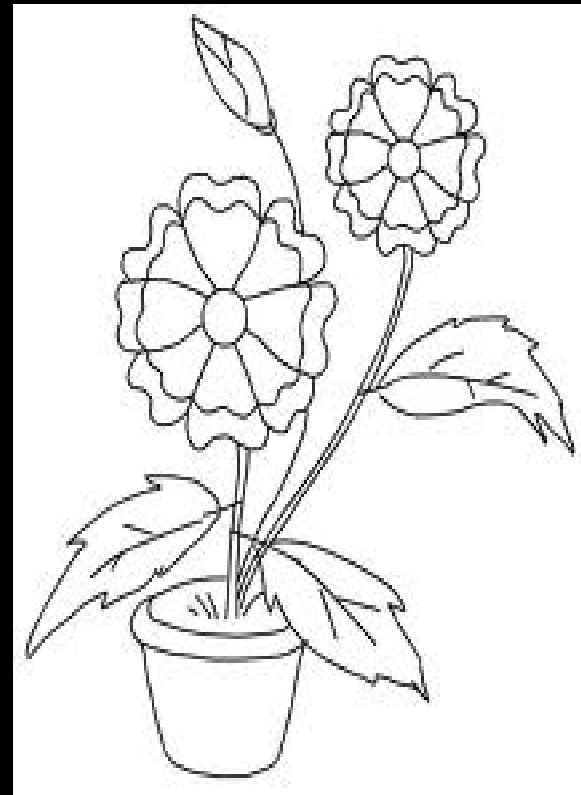
Site

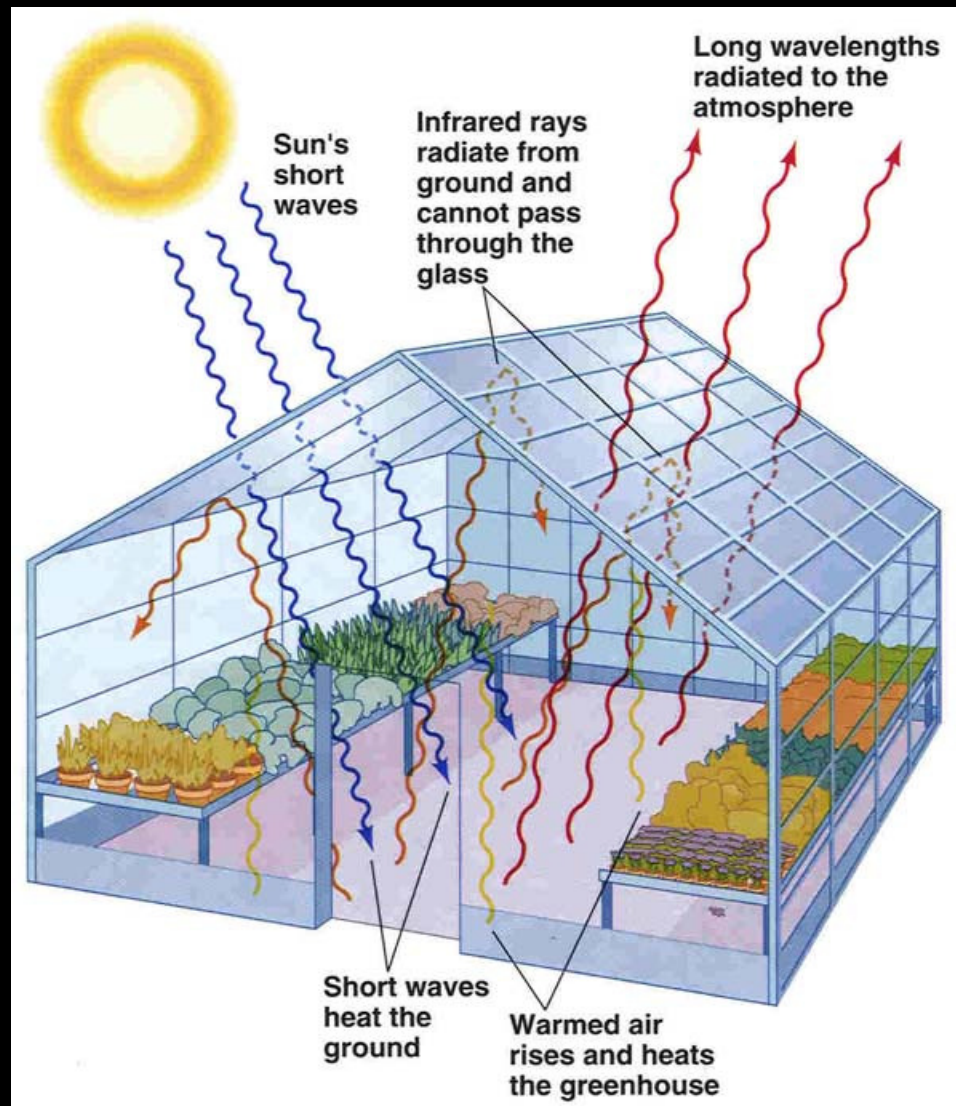
Solar exposure

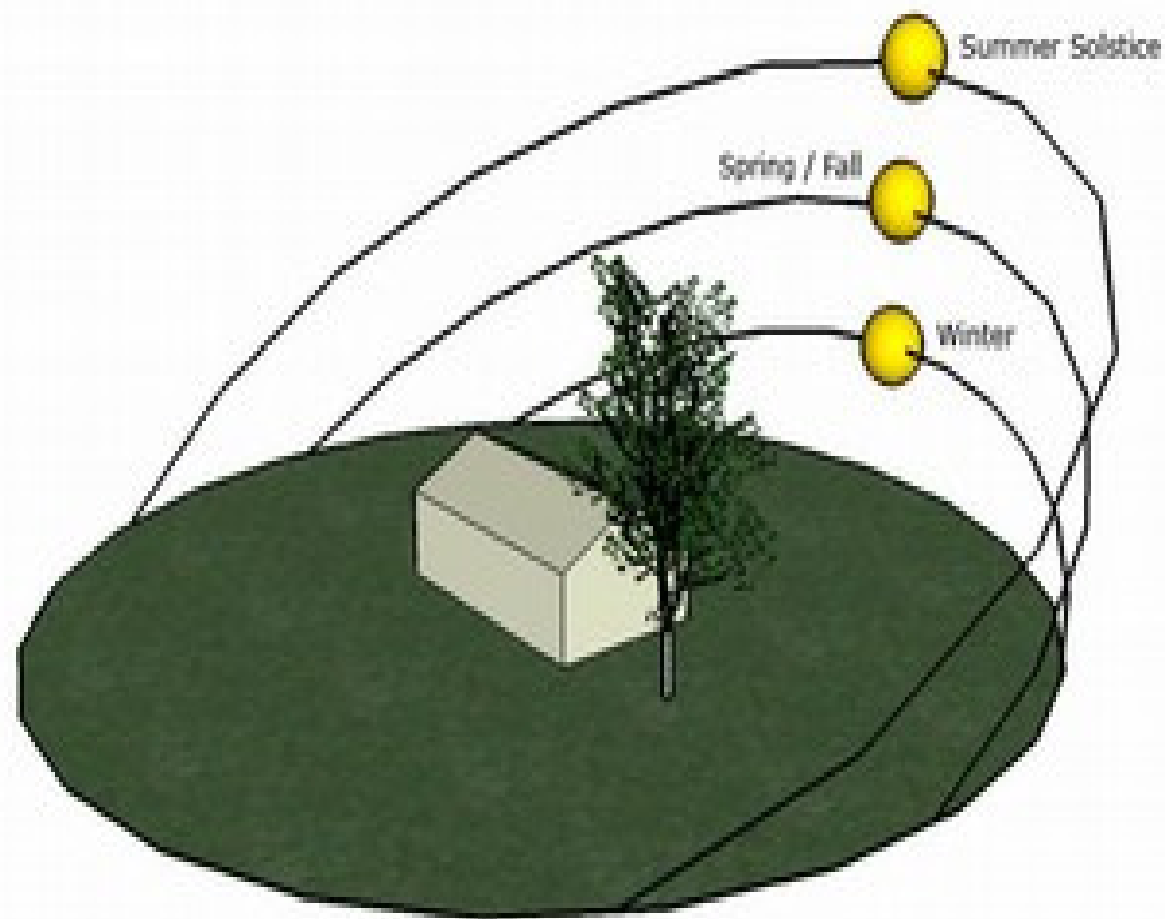
Wind / Water

Code

House

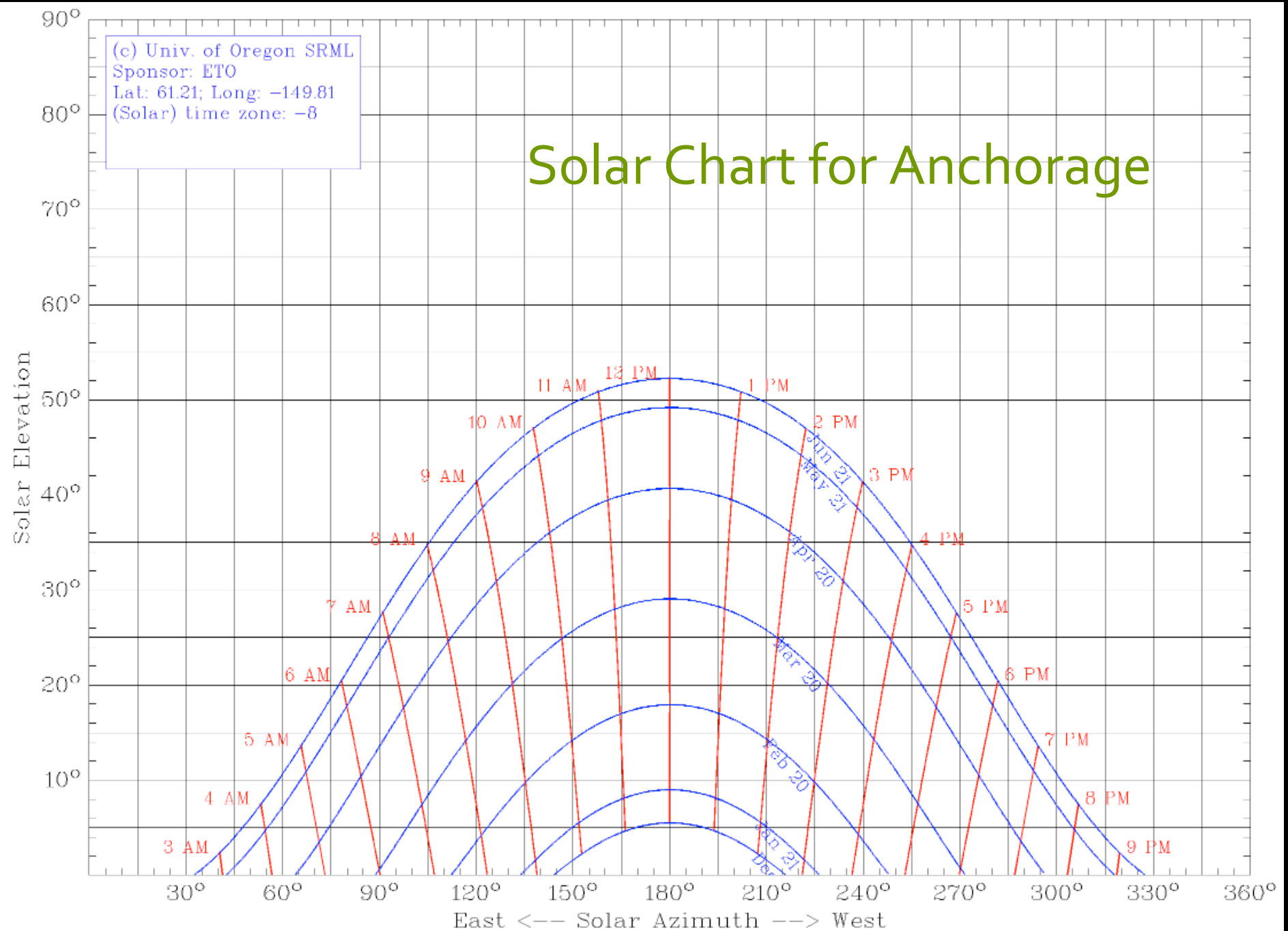


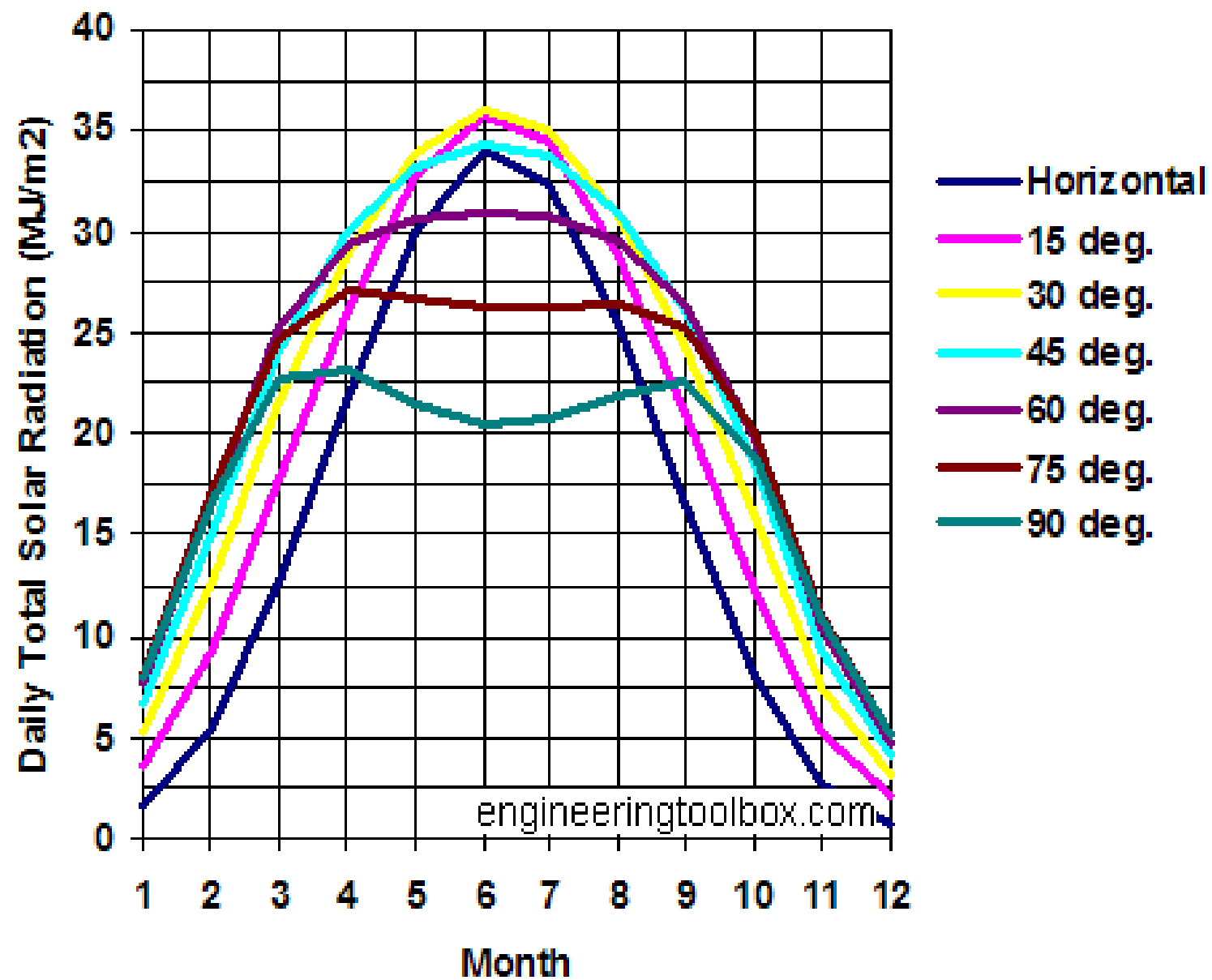




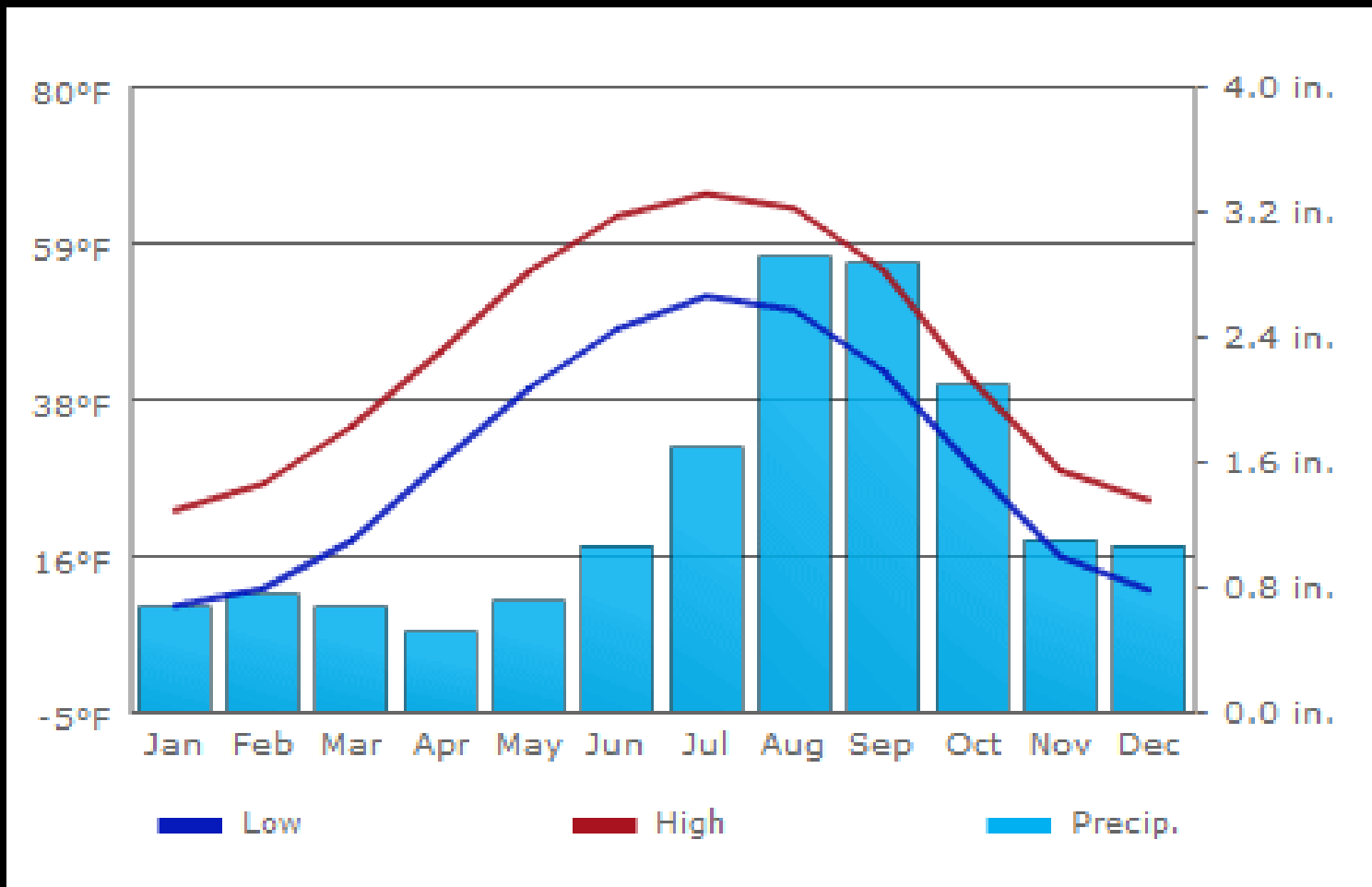
(c) Univ. of Oregon SRML
Sponsor: ETO
Lat: 61.21; Long: -149.81
(Solar) time zone: -8

Solar Chart for Anchorage





Temperature and Precipitation for Anchorage



Design Considerations

Temperature

Optimum is 55-85 degrees

Possible sources:

Electric

Combustion

Solar

Biological

Consider cost, reliability, maintenance

Choose more than one!



Design Considerations

Light

Optimum is 11.5 hours per day

Reflect light onto plants with white paint

Design Considerations

Humidity

Optimum is 45-60%

Design Considerations

Ventilation/Air Tightness

Control temperature and humidity
Automatic openers
Cross ventilation























Cold Frames and Floating Row Cover



Floating Row Cover



Lessons

- Chickens are dirty little dinosaurs who like foam
- Heat growing beds and ground or beds alone
- Chicken access adds to air infiltration
- Pests and rodents are attracted to a warm environment full of seeds and food
- If vegetable productivity is the only goal, there are cheaper ways
- Sliding snow is dangerous to trees and chickens

Alaska Food Challenge

- *The **challenge** is to acquire as much food from Alaska as possible.
- *The **purpose** is to increase our own consumption of Alaskan foods and inspire others to do the same.
- *The **vision** is of a vibrant local Alaskan foodshed, which provides an abundant, delicious, and affordable diet.

Our Pledge

- Grow what we can ourselves
- Support local producers
- What's in the pantry is fair game
- Small carbon footprint exceptions
 - Socialization clause



Sourcing Local Foods



Growing our Own at the Williams Street Farmhouse



Getting an early start, March 6, 2011



Expanding the Garden



July



Expanding Variety



Harvesting... and Processing



Meat Birds



Harvest Tally

Matt and Saskia: 1212 lbs

James and Kelly: 410 lbs

Total Pounds: 1622 lbs

Approximate value:
\$5460

Approximate costs:
\$200 seeds and starts
\$70 chicken feed



Foraging



Salmon

Catching: 3 days

Processing: 3 days

(two people)

Total pounds: 224

Approximate value: \$4,032

Approximate cost:

\$270



Salmon sausage



Caribou

Hunting: 3 days (two people)

Butchering: 2 days (four people)

150 pounds of meat

Approximate value: \$1500

Approximate cost: \$300



Foraging Totals

562 Pounds

Approximate Value:

\$6506

Approximate Costs: \$570



Local Purchasing



Purchasing Foods

We purchased:

Cheese

Cream

Wheat and barley

Seafood

Meat

Tomatoes

Total: \$434

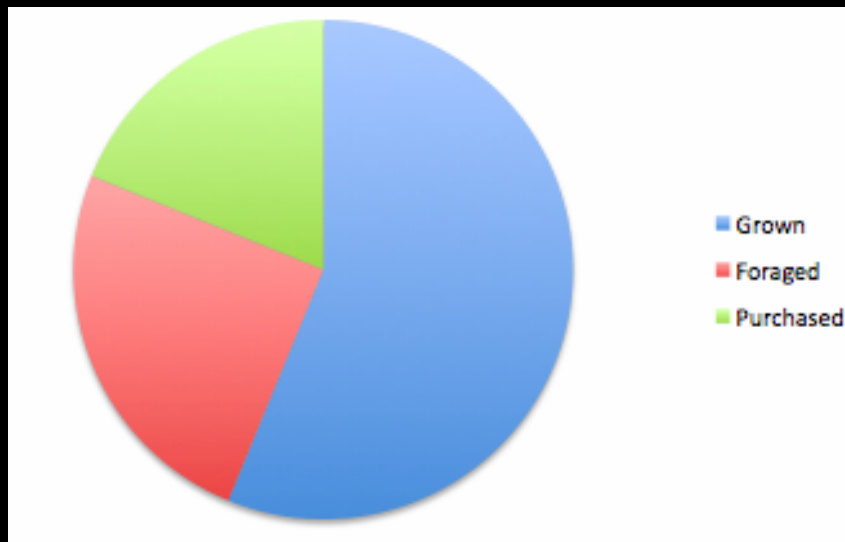


Bartering

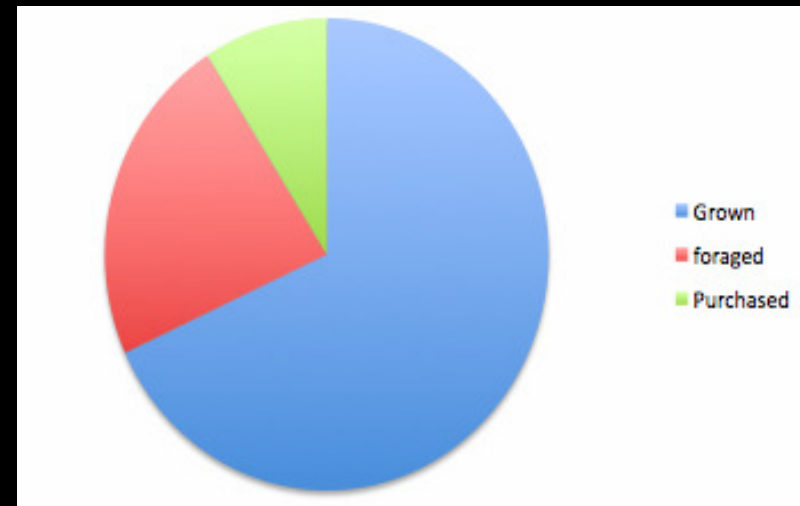


Sourcing of Local Foods

Saskia and Matt



Cathy and Randy



By Weight

Money

Total costs \$1273

Plus infrastructure (greenhouse, fence, cold storage, freezers)

Freezers and pantries are well-stocked for winter.

Price per pound:

Growing: \$0.23

Foraging: \$1.06

Purchasing: \$1.55



Costs

■ Grown
■ Foraged
■ Purchased



Pounds

■ Grown
■ Foraged
■ Purchased

Time

Roughly part-time for one person, seasonally driven. Plus many weekends and evenings for two people.

Example processing times:

Greens: 4#/hour

Applesauce: 2 quarts/40 minutes

Butter: 4#/2.5 hours



Health

Our diet is based on natural, whole foods: grains, vegetables, berries, dairy products, and wild meat and fish.

We get lots of exercise and fresh air!



Red Edge Design



Urban Homesteads for Modern Living

Energy Ratings
Workshops
Consultations
Designs

Matt Oster and Saskia Esslinger

Rededgealaska.com

907.563.1119

Williamsstreetfarmhouse.wordpress.com

Find us on Facebook:

Red Edge Design

Alaska Food Challenge
