

U.S. Aquaculture Basics

Things you need to know

There are 7 key species of fish produced in the United States

1) Trout

a. Mainly found in Idaho, North Carolina and Pennsylvania, but can be farmed anywhere there are mountains with cool water runoff



2) Bass

- a. Includes Large Mouth Bass, Striped Bass and Sea Bass
- b. If raised in a RAS system, bass can be grown anywhere
- c. If raised in a pond system, bass require warm water
 - Produced in the North in the summer only
 - Produced in the South all year long

3) Tilapia

- a. Currently found most frequently in Virginia, Iowa and California, but can be grown anywhere since they are produced in RAS systems
- b. Tilapia are a warm water species that will die if they get cold

4) Catfish

- a. Mainly found in the South (Mississippi, Alabama, etc.) and some smaller productions in California
- b. Warm water species

5) Pond Fish

- a. Includes Blue Gill, Crappie, Sandfish and ornamental fish like Koi
- b. Warm water species, but can survive colder water as long as there is no ice

6) Perch

a. Produced in Northern climates and can survive winter weather as long as there is no ice

7) Sturgeon

- a. Typically grown in RAS systems, some in controlled pond environments
- b. Grown for caviar (Beluga sturgeon are the most expensive at \$420 per $\frac{1}{2}$ oz.!)
- c. White sturgeon most commonly produced in California and Idaho
- d. Males will be sold for meat at 3-4 years of age
- Females are grown for caviar which is harvested at their maturation of 10-12 years of age











There are 3 main types of production systems in the U.S.



Recirculating Aquaculture Systems (RAS)

- a. Indoor facilities that allow for all year long production of any species
- b. Producer is in control of all the variables, including water temperature, pH, and flow, but someone needs to be on-site 24/7
- c. Approximately, 95% of water is recycled as water passes through drum filters that remove heavy, sticky particles
 - i. Feed makes a big difference in RAS production systems
- d. Requires a large capital investment



Pond Systems

- a. Most common production system in the U.S. currently
- b. Can be found in a majority of the states, but depends on availability of water and regulatory constraints
- c. These are constructed ponds often built near natural springs, through wells, or fed through a river



Raceway Systems

- a. Second most common production system in the U.S. currently
- b. Typically fed through a river
- c. Water comes in one end and goes out the other



**Offshore net pens

 This 4th type of production system (nets in the ocean) is not found in the U.S. due to regulations but worth mentioning for knowledge

Where to find more in-depth information about aquaculture in your region

- 1) Hatchery list from state associations
 - *Become members of your state's aquaculture association!
- 2) Local aqua extension agents at regional agencies or state universities
- 3) State and federal hatcheries (managed by the Department of Fish and Wildlife)

