



# AQUACULTURE IN SOUTH DAKOTA

## Economic Impact:

- **\$9.1 billion** in economic output
- **36,307 jobs**
- **\$294.4 million** in income taxes

Contributions are from animal agriculture, which includes aquaculture (2014).

As demand for seafood continues to increase, aquaculture, or farming in the water, is an environmentally responsible and efficient method of protein production and an option we must consider to complement our sustainably managed wild fisheries.

## What Types of Fish?

South Dakota hatcheries produce salmon, trout, walleye, yellow perch, and muskellunge for stocking. South Dakota's animal agriculture consumed almost 335.7 thousand tons of soybean meal, placing the state at #23 in the U.S. for soybean meal consumption (2014).

## The Most Sustainable Protein

The aquaculture industry utilizes science-based practices to produce farm-raised seafood in the most efficient way possible, which helps protect and preserve our natural resources in a changing climate. Finfish aquaculture is the most sustainable and efficient method of animal protein production. Further, technological advancements in feed production, using soy and microalgae oil, have led to the development of new plant-based feed solutions. Other forms of aquaculture like shellfish and seaweed farming require no feed inputs and act as filters to clean the ocean environment.

## How Does Aquaculture Address Food Security?

Food security and food safety start locally. U.S. aquaculture producers must adhere to strict environmental and product safety rules and regulations so that South Dakotans can be certain that the fish they're eating is safe. Up to 85% of the seafood consumed in the U.S. is imported, with 50% coming from overseas farms, so why not grow our own local food?

## State Aquaculture Businesses

South Dakota's soybean industry is among the key beneficiaries of aquaculture expansion in the state, an emerging U.S. sector, which will increase if federal legislation supports expanded U.S. aquaculture. The South Dakota Soybean Checkoff funded research at South Dakota State University aimed at increasing soy in aquaculture diets, using soybeans as a replacement for fishmeal. Because this research was so successful, a new company was formed in Brookings, S.D., Prairie AquaTech. The Prairie AquaTech manufacturing plant is a 45,000-square-foot commercial-scale facility capable of producing up to 30,000 tons annually of ME-PRO (Microbial Enhanced Protein), which extracts high-quality protein from the soybeans. It's pre-engineered to expand to 60,000 tons and is centrally located for efficient access to road, rail, and ports for global distribution.

## Hatcheries

- **Blue Dog State Fish Hatchery** produces walleye, yellow perch, and muskellunge for stocking across South Dakota. 14 different fish species have been reared at the hatchery.
- **Cleghorn Springs State Fish Hatchery** produces trout and salmon. The hatchery produces over 100,000 pounds of fish yearly. An enclosed spring provides 6,000,000 gallons of 52-degree water daily, and after use, the water flows into Rapid Creek.
- **The Whitlock Bay Salmon Station** sits along the shores of Lake Oahe at Whitlock Bay, 18 miles west of Gettysburg, near the West Whitlock Recreation Area.
- **McNenny State Fish Hatchery** produces trout and salmon for stocking across South Dakota, approximately 90,000 pounds of fish each year. Three artesian wells and numerous springs provide nearly 4,000,000 gallons of 52-degree water daily, and the water flows into Crow Creek.

- Spearfish, S. Dakota is home to the **D.C. Booth Historic National Fish Hatchery & Archives** where visitors can learn about the history of local hatcheries and even feed the trout! It is a federally funded hatchery listed on the National Register of Historic Places and is a free educational facility for tourists of all ages. Today between 20-30,000 brown and rainbow trout are stocked at the hatchery that can be viewed and fed. Visitors can enjoy two nature trails and an onsite museum that offers a glimpse at rare artifacts, tools and antiques. The site includes a National Fisheries Archives that houses 150,000 specimens and artifacts.



The Von Bayer Museum of Fish Culture at the D.C. Booth Historic National Fish Hatchery in Spearfish, South Dakota.

## RESOURCES

[South Dakota Soybean Checkoff, Prairie AquaTech, South Dakota Game, Fish & Parks, D.C. Booth Historic National Fish Hatchery & Archives](#)

Source: [South Dakota Soybean Checkoff, South Dakota Game, Fish & Parks, USDA Census of Aquaculture](#)