



# Ministry of Agriculture and Lands Ministry of Environment

## White sturgeon and white sturgeon aquaculture

White sturgeon is a very large and long-lived fish, at times exceeding 15 feet in length and over 100 years of age. These fish are an important part of the Province's biological heritage. Over the past century though, white sturgeon populations throughout their range have been adversely affected by over-fishing, construction of hydroelectric dams, drainage projects, competition for food with people and by declining water quality as human populations and activities intensify.

At least six distinct white sturgeon populations have now been identified in BC. Three of these populations, the upper Columbia River, the Kootenay River and the Nechako River populations, are especially weak and may be on the brink of extinction. In each of these cases, the total number of remaining fish is low and the population is predominantly composed of older individuals. The lack of young fish indicates either spawning failure or very poor juvenile survival rates.

A comprehensive recovery strategy has been developed for each of these populations. For the Columbia and Kootenay populations, these strategies have been developed collaboratively with counterpart agencies and organizations in the United States, and include the operation of conservation hatcheries, which are being used to cautiously rebuild the wild populations.

There are at least three more distinct populations in the Fraser River mainstem. Juvenile sturgeon are a significant component of the Fraser River populations, indicating that these groups are successfully spawning. However, the Fraser populations are still considered to be "at risk", in large part because they have not recovered from major declines experienced in the early 1900s.

Additional measures have been taken to improve the white sturgeon's prospects for recovery. In 1994, commercial and sport harvests of sturgeon were closed in the province and First Nations people voluntarily stopped their sustenance harvests. This important step should allow more fish to reach reproductive age and may help to rebuild some stocks. Even more information is emerging from the efforts and commitment of community leaders and stewardship groups such as the Fraser River Sturgeon Conservation Society.

In November 2003, the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) determined that white sturgeon populations in Canada should be considered an endangered species. Subsequently, in August 2006 the Government of Canada added white sturgeon populations from the Kootenay, Nechako, Upper Columbia, and Upper Fraser Rivers to Schedule 1, the list of species protected under the *Species at Risk Act* (SARA). White sturgeon populations in the Lower and Middle Fraser River were not added to the list. All white sturgeon populations will continue to be carefully managed under the *Fisheries Act* and stakeholders will be engaged in rebuilding and conservation efforts.

Still more work is needed to secure a future for these fish. It is important that the public support essential research programs and population studies and report all illegal sturgeon fishing.

Commercial sturgeon farming in BC currently occurs at only one facility, located on the Sunshine Coast. Farmed sturgeon from this facility have now reached a marketable size and are available at fish markets and restaurants in the lower mainland. Other legitimate sources of sturgeon meat include commercial fisheries in the Pacific Northwest and sturgeon farms in California.

As it is illegal to buy, sell or possess any wild BC sturgeon, the ability to identify farmed sturgeon as distinct from illegally-caught sturgeon is a key management tool for producers and regulators alike. Proper identification ensures that regulatory agencies have the ability to manage wild stocks. It also provides producers with market stability, and both consumers and retailers with the knowledge that the product they buy is legitimate.

There are a variety of biological traits that can be used to distinguish farmed and wild sturgeon including genetic markers, fin ray analysis and tissue composition. Such analyses are effective, but can be expensive and time consuming.

Since 2002, the Ministry of Agriculture and Lands (MAL) and the Ministry of Environment (MOE) have been working to develop a comprehensive policy for commercial sturgeon aquaculture. This policy is nearing finalization. A tagging, tracking and licensing program is an important component of the draft policy. Under this program, live farmed fish must be physically tagged before leaving the farm site. Consumers and retailers will notice a small tag with the aquaculture producer's name and a unique number on all live farmed sturgeon. Legitimate business interests in live farmed sturgeon will also hold a license from MOE to possess, transport and/or sell these fish.

The tagging system will provide an immediate and unmistakable signal to retailers, consumers and regulatory agencies that a live sturgeon is of farmed origin. In the event of an inspection, biological markers such as fin rays, genetic markers and/or tissue composition may be used to verify the tagging system.

#### Contact Information:

If you have reason to question whether a live sturgeon is farmed, please call either of the 24 hour toll-free numbers below:

- Conservation Officer Service Call Centre toll-free number: 1-800-663-WILD (9453);
- Fisheries and Oceans Canada Observe/Report/Record line at: 1-800-465-4336.

If you have any questions regarding aquaculture licence requirements or you wish to report a compliance concern please contact the Senior Licensing Officer or a Fisheries Inspector at:

Aquaculture Licensing and Compliance Branch  
2500 Cliffe Ave.  
Courtenay, BC V9N 5M6  
Telephone: 250 897-7540

If you are calling long distance, you may call Enquiry BC at 604-660-2421 (Vancouver), 250-387-6121 (Victoria), or 1-800-663-7867 (all other areas) and ask to be put through to number above, free of charge.

For more information on sturgeon farming, the tagging, tracking and licensing system or the draft policy on commercial sturgeon aquaculture, contact MAL at 250-356-2238.