# Sproat Lake Invasive Species

### What are Alien Species???

Alien species are plants, animals and microorganisms from one part of the world that are transported beyond their natural range and become established in a new area. They are sometimes also called "exotic," introduced," "non-native," "non-indigenous" or "invasive" species.

Species that are considered aliens in this province may come from outside British Columbia or be native to some parts of British Columbia, but are counted as aliens in regions of the province where they have been introduced.

Not all species that arrive in new places are able to make themselves at home and start reproducing and spreading. However, alien species can get established if given advantages such as:

- · An agreeable climate;
- · No or few natural predators, parasites or diseases;

• An abundance of food plants or prey that lack protection against the newcomer; and an ability to out-compete native species and corner the best resources.

#### Why Should We Be Concerned?

Most non-native species that make their way to British Columbia are either beneficial or relatively harmless, and only a small percentage of these species will be able to survive independently - fewer still will be detrimental. However, all alien species must be treated with caution, because it is difficult to predict which ones will cause problems over time. Even those that have been harmless in the past could become troublesome if conditions change to conditions that are more hospitable and encourage reproduction and expansion (e.g., because of global climate change). There is cause for concern because the rate of alien species introduction is accelerating rapidly as global commerce and travel increase. Even though harmful aliens are a minority of all non-native species, the damage they do can be severe and wide ranging.

## What Types Of Invasive Species Are In Or Around Sproat Lake?

### Sunfish (see image below)

The Sunfish in Sproat Lake continue to be a problem as they feed on pretty much anything. They take away food from other lake species (especially salmon). They also reduce the growth of plants and other organic materials as they feed on them and uproot vegetation.



### American Bullfrog (see image below)

The American Bullfrog is invasive to Sproat Lake because it attacks the native species of the lake. If seen in the lake please contact the BC Ministry of Environment.



#### Milfoil (see image below)

Milfoil is the most common of plants in Sproat Lake. It impacts existing native species by displacing them and may also interfere with fish spawning.

It is transported from one area to another by humans, boats and trailers. Please ensure your boat and trailers are free of all weeds before travelling to bodies of water.





New Zealand Mud Snail (see image below)

Although these are not yet found in the lake we are doing our best to educate the public to avoid contamination. Residents and lake users are asked to keep their eyes open for small black snail colonies.

Please rinse boat before launching into Sproat Lake. This is very important if you have previously been in canal water. Also watch for mud on vehicle tires as this can be a contaminant.





#### Koi Fish (see image below)

For the past 4-5 years, residents of Sproat Lake have noticed increasing amounts of Koi in the lake. They are arriving in the lake mid-May and staying until the end of June as they are using the lake to spawn. It is believed that the Koi have gotten into Sproat Lake by being washed in by high water on various private properties or by people dumping their pets into the lake. The Koi are getting bigger in size each year. Koi can grow to more than 40cm and live to 20+ years in quiet, warm, nutrient rich waters (such as found in Sproat Lake).



Pregnant Koi found in Sproat Lake (photo was courtesy of Gary Rutter).



Eggs found inside Koi (photo was courtesy of Gary Rutter).

If you notice Koi in Sproat Lake, please contract the Ministry of Environment. Your information will be used to help the residents of Sproat Lake and the Ministry of Environment better understand these fish and why they are inhabiting our waters.

Send information via email entitled:

Sproat Lake Koi Sightings, to tracy.michalski@gov.bc.ca

In your email please note:

· Location of your sighting

- · Number of fish seen
- · Average size of fish
- · Date you saw fish
- · Name and contact information

IT IS ILLEGAL TO TRANSPORT LIVE FISH (either taking or dumping) into another location! Non-native fish (such as Koi) can reduce aquatic biodiversity and cause other various problems to our waters. If you are caught moving live fish without a permit you can be fined up to \$100,000. Those who are charged with a second offense can face up to a year in prison!!! It is critical to report people who are involved in such activity. To report a polluter, please call the Conservation Officer 24 Hour Hotline @ 1-877-952-RAPP (7277).

Together lets help protect our native fish in the BC Lakes and Streams!

For more information on Alien Species please contact:

BC Ministry of Environment Ecosystems Branch British Columbia Ministry of Environment PO Box 9338 Stn Prov Govt Victoria, BC V8W 9M

1-250-387-9500 wildlife@victoria1.gov.bc.ca



ALBERNI-CLAYOQUOT REGIONAL DISTRICT