## Alien Invaders in the Shuswap?

Submitted by the Kingfisher Interpretive Centre Society

If you listen closely, you can hear the change. As you stand on the banks of Gardom lake there appear to be fewer song birds. As you look in the water there is a lack of water based insects like skippers and boatmen. As you listen in the evening hours, even the frogs are silent. Are they breathlessly awaiting something, or has it already come?

It has come. A wave of invaders has taken hold of Gardom Lake, a wave that is hidden, working silently and with deadly efficiency, just beneath the surface. It has already brought with it a dark change to this once popular trout fishing spot. It has brought death.

"What is this invader?" "Where did it come from?" "What does it mean for the lake?"

It's not pollution, boating, beavers or even development. It is a fish found in many other areas of Canada, which is not native to this area of B.C. In 1996 biologists first discovered and recorded a yellow perch in Gardom Lake. Since that time the perch has prospered and its population has grown to a point where today it has all but destroyed the native trout stocks. It has done this by consuming the young trout and their food supply, the aquatic insect population. The reduction in aquatic insects has, in turn, led to a crash of other aquatic animal populations which rely on the insects including salamanders and frogs. The disappearance of these animals has led to the decline of land based predators such as mink, and birds. In short, the ecosystem is slowly collapsing.

How can a simple fish have such a catastrophic effect? Ecosystems develop over thousands of years to provide for the needs of the animals within them. When this new predator was introduced into Gardom Lake's ecosystem, the ecosystem could not adapt to the perch's voracious appetite and aggressive behaviour. As a result, today, the perch is almost all that remains in Gardom Lake.

The Gardom Lake situation is a perfect example of why transporting non-native fish is illegal in Canada. When new species are introduced they cause widespread destruction. Examples of this include rabbits in Kelowna, snails along the Pacific coast and Asian Carp in the U.S. Our only real defence against invasive species is to prevent them from being introduced. That's where you as a reader come in. Educate yourself on the impact and work to prevent introductions. Assist in prevention by not introducing species to your lake for recreational fishing and by taking unwanted pets such as frogs and fish to the pet store so they can dealt with properly.

In the meantime, changes are coming for Gardom Lake. To restore this ecosystem, we must take an aggressive stand to combat the invader. This means closures to all fishing until the invader is removed. It also means that the Province of B.C. will be seeding the lake with a natural toxin to kill the perch early this fall. Once the invader is gone, restocking of the lake will occur early next spring - with native populations. Once this is done, Gardom will be on the road to recovery. It is a slow and costly process to fix an invader problem, but it can also be easily prevented. Educate yourself, and report any live fish transportations to the RAPP line at 877-952-7277. Working together we can protect our delicately balanced ecosystems to prevent the loss of our treasured resources.