

Turtle Mortalities

The Deadly Reach of Invasive Plants

During the spring and summer months the [Fish & Wildlife Compensation Program] FWCP undertakes extensive invasive weed control in the region. This work would undoubtedly gain the support of the World Conservation Union which has stated that exotic species are the second greatest threat to biodiversity on the planet. The effects of noxious weeds, just like the roots of a plant, reach out in a myriad of directions and negatively impact native plant and animal species in many ways.

This was illustrated when, in May 2010, FWCP staff found nine dead western painted turtle hatchlings buried in the sand so entangled within the roots of spotted knapweed that they had no chance of survival. They were found at two nesting sites near Argenta and Cranbrook during routine cleaning which involves removal of invasive weeds and loosening of the sandy soil prior to the females' arrival in early June.

"It is not the first time we have found dead hatchlings as a result of root growth," says FWCP wildlife technician Thomas Hill. "So if we are finding instances of this occurrence we know that it is likely happening on a wider scale in other nesting sites."



The phenomena of invasive weed roots entangling painted turtle hatchlings was first discovered by Francis Maltby while undertaking nest site enhancement and monitoring work for the FWCP in 2000 near Revelstoke. What happens is the fibrous roots of invasive species such as knapweed and hawkweed can either encase the turtle eggs so that the hatchling cannot emerge or, even if the turtle escapes the confines of the egg, it can get entangled as the hatchling remains in the nest.

"In the Columbia region painted turtle eggs are laid from late-May to early-July and hatch in late-August but remain in the sand until they emerge the following spring," says FWCP wildlife biologist Ross Clarke who oversees the turtle work. "In the southern part of their range they hatch and then emerge from the ground straight away, but here at the northern extent of their range there is a much longer

duration when the hatchlings remain in the ground. As a result they are more vulnerable to invasive weed growth. In most cases the roots actually feed on the eggs and hatchlings which are nutrient-rich. We have even found dead hatchlings literally skewered by couch grass roots."

On a more positive note FWCP staff have extricated several entangled hatchlings, still alive, and taken them down to the water's edge. These bad-news findings highlight the impact of invasive plants at turtle nesting sites. "The reality is that we are not going to get rid of many of these invasive weeds," says FWCP public representative Grant Tower, "but it is imperative that we control the spread of them and continue to prevent them from infesting new areas."

*Angus Glass, Communications Coord.
Fish & Wildlife Compensation Program
Email: angus.glass@bchydro.com*