

# Blandings in Your Backyard

This leaflet brings you the latest news on the discovery of the rare and endangered Blanding's turtle living in the Pleasant River and Brookfield Mines area, right in your backyard! The Blanding's turtle is a secretive animal that inhabits brooks and wetlands, where it hides amid thick aquatic vegetation in our dark waters. Here is the story of how they were found, how many there are and the challenges to protect them.

## Discovering the Turtles -

In the mid 1970's, on two separate occasions, Blanding's turtles were spotted by accident, one as it crossed the highway in Pleasant River. Those sightings came as a surprise! More discoveries began in 1996 when Dr Tom Herman, a biology professor at Acadia University, began to focus the work of his students on this population of turtles.

Firstly, student Jeffie McNeil located 10 different Blanding's turtles in Deep Brook along the New Elm road. Then in the spring of 2002, Acadia student Brennan Caverhill began a detailed investigation of the surrounding wetlands.

To find these turtles, special traps were set to catch them unharmed. Every captured turtle was measured, weighed, photographed and the shell was given small identification notches. Many turtles were outfitted with a radio transmitter so they could be followed. That approach led to the discovery of key habitats where more Blanding's turtles were found. One adult male turtle, first found by a local resident, was outfitted with a transmitter. By following that turtle, 20 others were trapped in the brooks where it traveled. In turn, that led to trapping an adjacent and more remote brook where 20 additional turtles were located.

Now, after two seasons of work from May to November, 75 Blanding's turtles have been found in the Pleasant River to Brookfield Mines area.

#### Turtles On the Move -

The study so far has shown some differences in movement behavior.

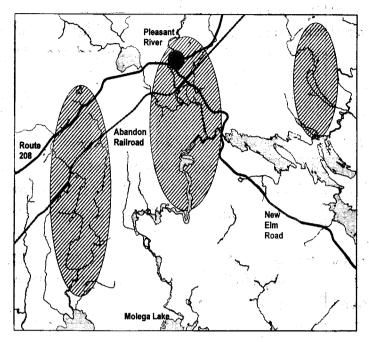
During summer, females travel extensively throughout streams and bogs.

These are areas within approximately a half kilometer of their nesting sites.

Interestingly, one female traveled two kilometers to where she nested and she had only three legs!

Males spend more time on land than females do. They don't move very much in summer but during the fall they become more active and travel considerable distances, sometimes up to two kilometers.

Juvenile turtles are seldom seen after their initial capture. They are elusive and stay well hidden. This suggests that there could be more juveniles yet to be discovered.



Map showing the known areas of Blandings turtle concentrations (the shaded areas) near Pleasant River.

## An Endangered Species -

Most Blanding's turtles live around the Great lakes, in the United States and into Canada. Their range extends eastward through southern Ontario and New England so that Nova Scotia has the most northerly and easterly population.

In Nova Scotia, Blanding's turtles have been declared endangered because of their isolation and the small number of known animals. Based on present estimates, our province has approximately 260 adult and juvenile Blanding's turtles in three separate and genetically distinct populations.

Pleasant River population - 75 turtles (approx. 50 adults and 25 juveniles) McGowan Lake population - 63 adults and juveniles Kejimkujik Lake population - 130 adults and juveniles

#### Creatures of Habit -

Research suggests that our Blanding's turtles know what they like and they stick with it. In all seasons of the year the habitats they frequent, in fact the precise locations, are the places where they were found in the past. For example,

while nesting sites vary, each nesting female will most likely return to her preferred nest site, within meters of where she laid her eggs the year before.

So it goes year round. Each turtle, while moving from time to time, will use the same part of its territory in the same season, year after year.

# Life Can be Tough -

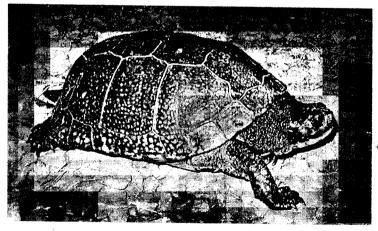
Imagine starting life as an egg, laid in the ground and then abandoned by your mother! That is the perilous start to every Blanding's turtle's life.

Each June, every nesting female Blanding's digs a hole in the gravel, lays from 8 to 12 eggs, covers the nest and leaves - never to return. The first threats come immediately from raccoons or other predators that smell the nest and eat the eggs. That is why turtle researchers immediately cover the nest with a wooden framed screen to protect the eggs while letting in sunlight.

Throughout the summer each nest must receive enough sunlight to warm and incubate the eggs. In some years, and 2003 was a particularly bad one, floods can cover nests on lakeshores and kill all the eggs.

If all goes well, by September or October the hatchlings dig their way out. Those under nest screens are measured and marked by researchers before being released. The emerged hatchlings must avoid predators and find a safe place to spend their first winter. Observations show these tiny turtles are very good at hiding. Blanding's nesting summary for 2003:

_	# Nests	Nests Flooded	Successful Nests	Hatchling
Pleasant River	9	0	3	turtles 10
McGowan Lake	12	4	<b>. .7</b>	32
Kejimkujik Nat'l. P.	23	21	2	14





A Blanding's turtle and a view of its bottom shell.

### Where are the Turtles Now? -

Right now, Blanding's turtles have settled into their chosen wintering sites in stillwater brooks, in bogs and even in manmade ditches. These locations have good water depth, little current and are off the beaten path of predators. Small beaver dams often play an important role in maintaining stable water levels - a vital factor in the winter. Sometimes several Blanding's turtles winter close to one another in very small areas, making those locations key to the survival of many turtles and perhaps the entire population.

## Thanks for the Helping Hand -

A sincere thank you to those who helped in these study and protection efforts.

- To landowners Gerald Mac Quarrie, Cedric Smith and Arlyn Turner who each hosted and protected a nest on their land.
- To the young bikers and ATV riders at the "sand spit" who saw and protected the caged turtle nests.
- To the following people: Winnie Allen, Ben, Carter, Nicki & Terra-Jean Feltham, Bertie & Wayne Fiddes, Dale, Kristina, Larry & Travis Forrest, Louis Frank, Peter Hope, Cody Mac Quarrie, Blaine Mailman, the Bernie Mailman family, Everett Nowe, Louie Wamboldt and others, all of whom helped in many ways.
- To John Mills, biologist with the NS Dept. of Natural Resources, for support.
- To Kejimkujik National Park staff for assistance in production and to the Blanding's Turtle Recovery Team for funding this Newsletter.
- This Newsletter was written and prepared by Peter Hope and Brennan Caverhill

## For More Information about NS Blanding's turtles -

Book - The Amphibians and Reptiles of NS by John Gilhen (for sale or at libraries)

Pamphlet - The Turtles of Kejimkujik National Park - phone Kejimkujik at 682-2772

Internet - NS Blanding's turtle website - http://www.speciesatrisk.ca

- Kejimkujik Nat'l Park website <u>www.parkscanada.ca</u> (Go to Kejimkujik)
- Environment Canada Species at Risk website- www.speciesatrisk.gc.ca



Typical Blanding's turtle habitat on Bull Moose Brook.