Column #5. Celebrating Place: Anniversary Notes from Blue Hill Heritage Trust

"What Ate My Cat?" - Wildlife and People Living Together
By Jim Dow and Charlotte Clews Lawther, Blue Hill Heritage Trust Staff

The loss of the family cat to a wild animal is something that many of us have experienced. Yet that occasional sad event is more than balanced by the rewards of sharing a landscape with a variety of wild critters, as we do here on the Blue Hill Peninsula. The sighting of a deer, fox, bobcat, bear, beaver, fisher or moose (maybe even a mountain lion!) is an exhilarating moment. An easy and frequent connection with wildlife is in fact one of the joys of living here. It is not something most Americans still have in their daily lives.

Of course the way we humans use and populate this landscape often makes it difficult for wildlife. Their habitat is compromised or lost. The corridors that they use to travel across the landscape to feed and breed are blocked by roads and buildings. These changes usually occur incrementally- it is not something we intend or usually even think about. Surely, it seems, there is plenty of room for us all here. But the truth is, unless we take some action, this place, like so many others to our south, will lose its special wildlife resources.

One thing we can do is protect some large areas of unfragmented, undeveloped open space in our midst. The Blue Hill Heritage Trust is working to do that, at places like our 878 acre Kingdom Woods Conservation Area. Why? Let's use the critter that may well have eaten your cat as an example.

The fisher is a fierce predator that likes porcupines for dinner (imagine that!) but will gladly enjoy a menu of cat or other small mammals. The presence of fishers and their relatives in the weasel family (ermine, otters and skunks, to name a few) - all of which call the Blue Hill Peninsula home -is a good indicator of wildlife habitat. Fishers need space – lots of space. They also need food. They require a healthy population of prey, such as mice, snowshoe hares, squirrels, chipmunks in addition to porcupines and yes, from time to time, domestic animals like house cats. Most of these little "weasel snacks" spend virtually all of their waking hours eating grass, seeds, nuts and berries. Like the predators, the prey also eat a lot.

To understand why protecting large areas of intact forest, wetland and coastline is important it helps to know how much space is needed to support a few individuals in the food chain described above. Let's imagine that one fisher requires 1,000 calories each day. That's about twenty mice per fisher per day. And before they are eaten, each of these smaller prey require at least 100 calories worth of grass, grain, berries and nuts each day. The area required to sustain the <u>daily</u> growth of 2,000 calories of rodent-edible plant material, that sustains the twenty mice that sustains the single fisher, is nearly ten acres of forest. But this simple estimate based on energy requirements falls short because in reality an individual fisher will cover an average of 6,000 acres in search of not just prey, but mates. After all, one fisher is

not enough to sustain a population, nor is two. Even in the animal world, inbreeding never ends well. Fishers need plenty of space, food, and other fishers.

Another important requirement is connectivity, which matters almost as much as size when it comes to habitat. For example, Kingdom Woods' protected forest and wetlands are certainly enough space to sustain a healthy population of fishers and other weasels. In fact, it is very likely that more weasels will be born in the Kingdom Woods than can live there. Each summer many young weasels will set out from Kingdom Woods to seek greener pastures. They need travel corridors that connect this "population source" to other habitats.

Some will successfully cross the busy roads and hostile back yards to settle in some small patch of forest a few miles away. These are almost always a dead-end. Without enough space, starvation and inbreeding are inevitable –not to mention the hazards of living "on the edge" close to people, and dogs. That's why these small patches of forest are considered a population "sink". As these single animals die off they are continually replaced by other individuals born at a "population source". Without a source area, such as Kingdom Woods, animal populations simply cannot sustain themselves.

Places like Kingdom Woods in Blue Hill, and our newer Wallamatogus Mountain Preserve in Penobscot, will play an increasingly important role in maintaining our local wildlife populations as time passes. And as we continue to expand the use of our landscape as human habitat, we will surely need to set aside additional places to accommodate the needs of our wildlife neighbors who add so much to our lives – even if they do snatch a beloved pet now and then.