

Did rabies vaccine bait work?

By **PATRICK CASSIDY**
STAFF WRITER

The three veterinary students handled the sleeping raccoon quickly but with care.

"This is a female. She had babies this spring," Katie Halfen, 26, said as she examined the masked mother for injuries.

Jessamyn Kennedy, 30, and Anna Ludi, 24, simultaneously prepared syringes and dental equipment as part of a protocol designed to gather the most information and cause the least discomfort to the animal.

These doctoral students from Tufts University Cummings School of Veterinary Medicine are spending the summer trapping and testing animals to determine the success rate of a new type of bait as part of the Cape Cod Oral Rabies Vaccine Project.

The trio is quick to point out the animals are not hurt and the data gathered are essential to an effort to push rabies back beyond the Bourne and Sagamore bridges.

Captured animals are anesthetized before they are weighed, a blood sample is taken and a small tooth is removed.

The blood samples will be tested for the rabies antibody at the Centers for Disease Control and Prevention in Atlanta.

Presence of the antibody means the animal received the vaccine.

A biomarker that can be found in the enamel of the extracted tooth indicates whether the newest version of bait was eaten.

The animals are tagged on each ear to show that they have been tested and by whom.

"She gave us some blood, a tooth. She's got her jewelry. Now she'll go impress all her friends," Halfen said after tagging Friday's first raccoon.

For 10 years there was no rabies on the Cape because bait infused with vaccine was dropped on both sides of the Cape Cod Canal as a rabies buffer.

Since the discovery of rabies in a Bourne raccoon in 2004, the infectious disease has spread rapidly and is now reported in every Cape Cod town and across several species.

Provincetown reported its first case in March, and a rabid raccoon that is believed to have attacked at least two people in the town on June 28 has reinforced the need for an eradication program.

The testing by the Tufts volunteers is a follow-up to a baiting vaccination program done earlier this year.

Volunteers distributed 60,000 pieces of fish-meal bait with rabies vaccine from Yarmouth to Provincetown.

The bait was laid down by 20 teams over five days in the first week of May.

Team members dropped the bait at specified intervals.

Where a driveway was present, or when volunteers were concerned about pets picking up the bait, the pattern was adjusted.

"That's part of the art of the baiting," said Dr. Janet Martin, one of the project's Tufts coordinators.

The vaccine is not harmful to pets, but if people get it on them they may develop a rash, Martin said. Only one incident has been reported in a decade.

Bait was also dropped from helicopters over large tracts of land with lower population densities, she said. Martin and fellow program coordinator Dr. Alison Robbins chose two areas to test the success of the new bait.

Halfen, Kennedy and Ludi first trapped and tested animals along the Eastham-Wellfleet town line over a 10-day period in June.

The second series of 50 traps was laid down about a week ago, but their locations - recorded on a global positioning system by the team - are being kept secret until after the 10-day trapping period is over. It is a federal crime to disturb the traps.

On Thursday, cat food, marshmallows and a vanilla spray used as bait for the traps enticed five raccoons, a skunk and a box turtle.

The new vaccine-laced bait distributed in May was specifically designed to work better on skunks than the traditional bait.

There were no skunks on Friday, but the team did capture two more raccoons, a fox, another box turtle and a cat.

The cat and box turtle were immediately released, since these animals are not part of the study.

The raccoons and fox were anesthetized and their blood and tooth samples taken.

The animals are later returned to the traps and released several hours later, after waking up.

Traps are laid only on the property of homeowners who agree to participate, and on town land with permission.

"I talked to my friends out in the woods and they said as long as they let them go that's all right,"

Arthur Bickford said.

Bickford, 80, is a Tufts alumni who agreed to let the team set traps on his property for animals he knows by name.

"There's Sam the skunk and Arthur the raccoon," he said. "But today they're demanding more than just marshmallows."

There were no animals in the traps on Bickford's property Friday, but Halfen and the gang said they'd be back to check again the next day.

Patrick Cassidy can be reached at pcassidy@capecodonline.com.

(Published: July 10, 2006)

Copyright © Cape Cod Times. All rights reserved.