

Jonathan Way. Eastern Coyote Project Annual Report 2002

Wild coyote ecology study - Letter Permit #046LP01

Seven box traps were in the field on Cape Cod during 2002. We actively trapped on Cape Cod from January - March with an additional small amount of effort during April and May. From March - May, we began to focus on our Boston study. In Boston, we began baiting sites as early as January 2002 but did not arm any of our traps (4 to start the study; a 5th trap was obtained in July from the Cape Cod study site) until May 2002. That coincided with the captive coyote pups moving to the Stone Zoo during that time (see below).

Table 1. A list of our captures, both on Cape Cod and in North Boston (centered around Revere and Saugus) during 2002. Note: these values include 1 crow double capture on Cape Cod and 1 raccoon, 1 starling, and 1 red-tailed hawk double capture in north Boston.

Species Captured - Cape Cod - North Boston -Total Values

Raccoon	22, 32, 54
Opossum	5, 21, 26
Skunk	9, 28, 37
Coyote	6, 2, 8
Dog	0, 2, 2
Crow	4, 0, 4
Domestic/feral cat	1, 10, 11
Red-tailed hawk	3, 4, 7
Gray Fox	0, 1, 1
Fisher	0, 1, 1
Muskrat	0, 1, 1
Starling	0, 2, 2
Nothing in Trap (but shut)	7, 13, 20

All of the 6 coyotes captured on Cape Cod were captured for the first time during 2002. Please refer to Table 2 for a list of coyotes captured in box traps during 2002 on Cape Cod. Included in the table is data collected on the coyotes during 2002. Table 3 lists the dead coyotes that we recovered during 2002.

Of the 2 coyote captures in north Boston, it involved the same 5-6 year old female coyote both times (Maple #BN0202 - originally captured on 5/20/02 then recaptured on 6/3/02). This coyote had 3 pups in north Revere during 2002. She was hit and killed by a car on July 9, 2002 while exploring outside of her usual range (to the southeast of north Revere). We obtained 187 successful locations on this 30 pound coyote when she was alive and documented her in parts of 5 different towns (approximately a 15 square mile home range): Revere, Saugus, Lynn, Malden, Peabody, and she also probably stepped foot in the SE part of Lynnfield (near Lynn Woods).

Table 2. Eastern coyotes captured in box traps and radio-monitored during 2002 on Cape Cod, Massachusetts.

Date - Coyote - ID# - Wt.(lbs) - Social status & sex - Comments

1/3 Sog 0202 42 Dispersing female Killed by car N of Cape Cod canal
(5/18/02) on Route 25
2/23 Slot 0201 31.6 Yearling male small home range near Sandy Neck Beach - still
nearby as of 12/26/02
2/23 Carm 0203 35 Yearling Male Probable son of Jog; remained on territory after death
of Jog
3/6 Cake 0204 30 Probable Yearling (female) Gave birth to pups; still in Centerville area;
fate of pups unknown
3/8 Glif 0205 33 Yearling male Dispersed from study area; location unknown
3/8 Tiny 0207 27 small yearling?
(male) Had mange - lost radio-contact with him - from Sandy Neck area

Table 3. Dead coyotes recovered during 2002. All were from Cape Cod, Barnstable County except for Maple (North Revere).

Date - Sex Cause of death - Comments

1/4 Female Shot 32 lb. On Hyannis Airport runway
5/4 Male Vehicle originally hit near exit 5 (Jog's territory - sibling of Carm?)
5/18 Female Vehicle Sog, hit north of Cape Cod Canal
6/3 Male Vehicle Hit on territory between exits 5 & 6 (route 6)
6/20 Female Vehicle Pup by Marstons Mills Airport - probable offspring of Mole
(#0110)
7/12 Female Vehicle Maple hit on route 107
7/25 female vehicle killed in Mashpee - a pup (ca. 20 lbs) near the Fairgrounds
7/29 female vehicle Pup killed nearby in Mashpee to 7/25's pup
8/5 male vehicle killed on route 130 in Mashpee near Otis Air Base
9/30 female vehicle approx. 6 month pup in south Mashpee
10/21 male vehicle killed in Centerville on Craigville Beach Road
A special thanks goes to Charlie Lewis (Animal Control Officer for Town of Barnstable)
and to June Dailey (Animal Control Officer for Town of Mashpee) for reporting many of
these road-kills to us). In addition to these coyotes, we also recovered a dead red fox in
north Revere (very close to where Maple was killed) and a gray fox off route 3 south in
Plymouth.

Captive coyotes - Permit # 052.02LP

On April 12, 2002, we obtained a litter of 5 3.5 week old pups from Falmouth. A special
thanks goes to the Falmouth Department of Natural Resources and to the Animal Control
Division for help in securing these pups. These pups were originally from a litter of 9.
Because this coyote group (the adults) were very acclimated to humans we decided that it

would be best to remove these pups instead of taking pups from a radio-collared female that was not causing any problems. The development of these pups is documented, in detail, on the website (<http://www2.bc.edu/~wayjo>) that I created this past summer. Briefly, 3 females and 2 males were taken from a litter of 6 females and 3 males. Two pups (1 female; 1 male) were stunted in growth and we immediately decided to take these 2 pups to ensure (or aid) their survival. Next, we subjectively took 2 females and 1 male that did not appear to exhibit fear of us (so they could be more easily socialized to humans). The pups lived at my house until May 13, 2002 then were transferred to the Franklin Park Zoo hospital where they (and I) lived for 30 days in order to get quarantined to go on exhibit at the Stone Zoo. On June 13, 2002 the coyotes were transferred to the Stone Zoo where they currently live in their permanent exhibit (the two males were given vasectomies in August in order to avoid breeding attempts this coming winter but to allow them to keep their hormones). The pups are now 9 months: the two males weigh 50 and 35 pounds; the 3 females weigh 43.5, 36.5 and 31 pounds. The pups are tractable enough (around me) that I can lock them in a smaller holding area and simply pick them up and weigh them. These 5 coyotes are planned to be on permanent exhibit at the Stone Zoo.

Manuscripts (peer-refereed)

One manuscript has been accepted and seven others are under review.

Way, J. G., I. M. Ortega, P. J. Auger, and E. G. Strauss. 2002. Box-trapping eastern coyotes in southeastern Massachusetts. *Wildlife Society Bulletin* 50(3): 695-702.

Way, J. G. et al. Eastern coyote denning behavior in an anthropogenic environment. *Northeast Wildlife*. Under Review.

Way, J. G. A synthesis of eastern coyote (*Canis latrans* var.) taxonomy. *Northeast Wildlife*. Under Review.

Way, J. G. Helping Behavior Facilitates Survival of Orphaned 8-week old Wild Eastern Coyote Pups. *Canadian Field Naturalist*. Under Review.

Way, J. G. Description and Possible Reasons for an Abnormally Large Group Size of Adult Eastern Coyotes Observed during Summer. *Northeastern Naturalist*. Under Review.

Way, J. G. et al. Movement and activity patterns displayed by eastern coyotes residing in a coastal suburban environment. *Canadian Field-Naturalist*. Under Review.

Way, J. G., I. M. Ortega, and P. J. Auger. Eastern coyote home range, territoriality and sociality on urbanized Cape Cod . Northeast Wildlife. Under Review.

Way, J. G. Radio-collared coyote crosses Cape Cod Canal. Northeast Wildlife. Under Review.

Miscellaneous

Please refer to the attached sheet that explains our methodology using the netlaunching device. This new technique will be attempted in 2003 to try to capture coyotes that we can not capture by box trap. Please also note that, it would be greatly appreciated if I (Jonathan Way) could be added as a permittee holder (along with Eric Strauss) and if David Eatough (Revere High School, Science Department) and Steve Cifuni (Boston College Undergraduate, Environmental Studies Program) could be added as subpermittees (along with Peter Auger) for the 2003 renewed permit. Because I will be the one with the F.I.D. card and will be netlaunching, it would be best if I was included as a permittee. Dave and Steve conduct most of the day-to-day trapping efforts in north Boston. Logistically, it would be helpful if their names were on the permit. Lastly, please include netlaunching as a capture option in our 2003 Letter Permit.

Finally, I have developed a website (<http://www2.bc.edu/~wayjo>) that describes our captive and wild coyote research. Please feel free to visit or make a link from your MassWildlife website, if desired.