

# **New Jersey Furbearer Management Newsletter Spring 2016**

NEW JERSEY DIVISION OF Fish and Wildlife

New Jersey Division of Fish and Wildlife Upland Wildlife and Furbearer Project

### 2016 TRAPPER AND HUNTER SURVEY

- WILL BE IN AN ONLINE FORMAT ONLY THIS YEAR.
- ALL TRAPPERS THAT PROVIDED AN EMAIL ADDRESS WILL BE SENT A LINK TO THE SURVEY BY APRIL 11, 2016.
- THE SURVEY WINDOW WILL CLOSE APRIL 30, 2016.
- CID# IS ONLY USED TO VALIDATE YOU ARE INDEED A TRAPPER AND PURCHASED A 2015 LICENSE.
- RESULTS WILL BE POSTED ON DIVISION WEBSITE IN FALL 2016.

THE SURVEY IS USED PRIMARILY TO ESTIMATE HARVEST LEVELS FOR FURBEARERS OTHER THAN BEAVER, OTTER AND COYOTE WHICH ARE REQUIRED TO BE REPORTED. WE ALSO ESTIMATE THE RIPPLE EFFECT TRAPPERS HAVE ON THE STATE ECONOMY, AND EVALUATE THE EFFECTIVENESS OF NEW REGULATIONS.

# IF YOU WERE EMAILED THE SURVEY LINK, PLEASE COMPLETE IT ASAP.

### Remember:

- To trap with or use cable restraints a person must have first passed a Fish and Wildlife-approved trapper education course which included use of cable restraints and carry their course completion card while trapping.
- Any person must be at least 12 years of age in order to obtain a trapping license.
- TAKE A KID TRAPPING OR MENTOR A NEW TRAPPER!



### In This Issue:

- Age and Condition Data for River Otter Harvested in New Jersey, 2005-2015
- Current Bills in the New Jersey Legislature (March 1, 2016) of interest to Trappers
- New Jersey Coyotes: Where aren't they?
- Furbearer Facts: Delayed Implantation in New Jersey Furbearers
- New Jersey Fisher Update

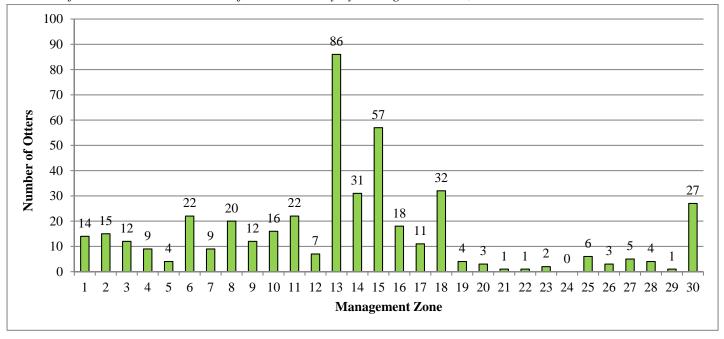
The New Jersey Division of Fish and Wildlife is *the* professional, environmental agency overseeing the protection and management of the state's fish and wildlife to maximize their long-term biological, recreational and economic value for all New Jerseyans.

# Age and Condition Data for River Otter Harvested in New Jersey, 2005-2015

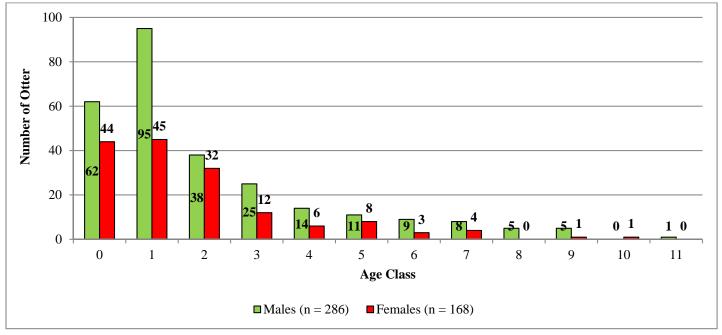
Many New Jersey river otter trappers may have wondered what the Division's Upland Wildlife and Furbearer Research Project has been doing with the river otter carcasses that have been collected from successful otter trappers since 2005. Since the Upland Wildlife and Furbearer Research Project began collection and examination of river otter specimens in 2005 we've handled 454 specimens prior to this year's trapping season.

Below are charts that summarize and illustrate all condition and age data.

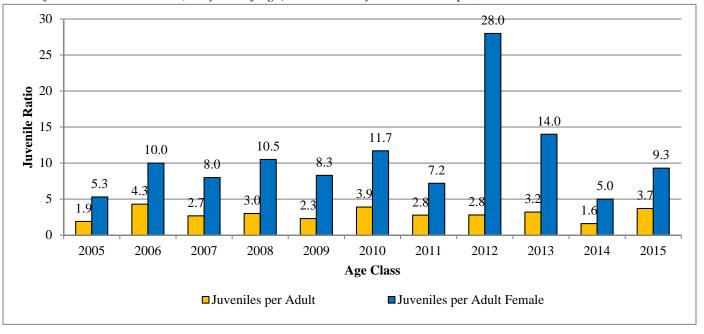
Location of 454 River Otters Collected from New Jersey by Management Zone, 2005-2015



Age Class Distribution of 454 Known Age River Otter Sampled from New Jersey, 2005-2015



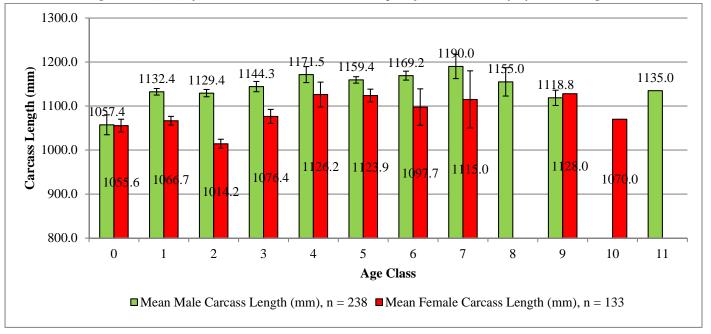
Ratio of Juvenile River Otters (0-2 years of age) in New Jersey's Annual Sample, 2005-2015



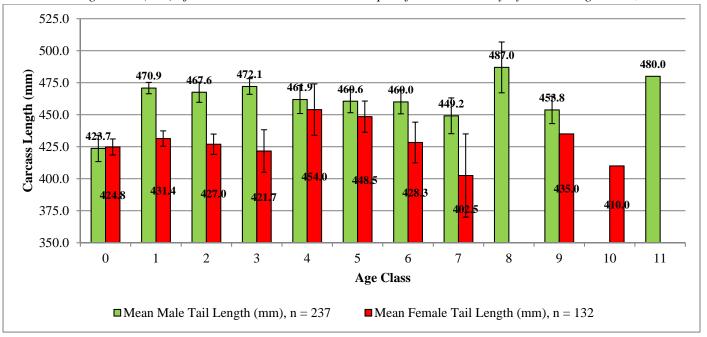
Mean Weight ± SE (kg) of 392 River Otter Carcasses Sampled from New Jersey by Sex and Age Class, 2005-2015



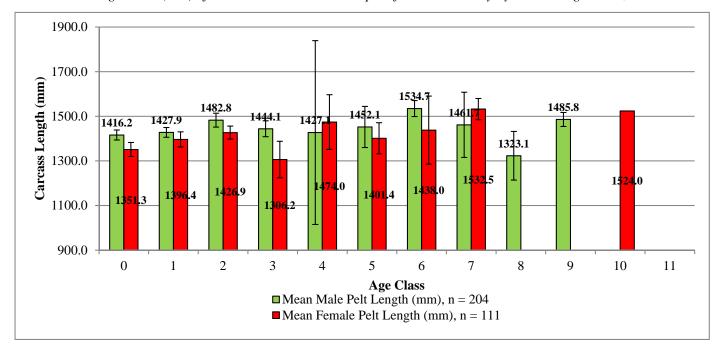
Mean Total Length ± SE (mm) of 371 River Otter Carcasses Sampled from New Jersey by Sex and Age Class, 2005-2015



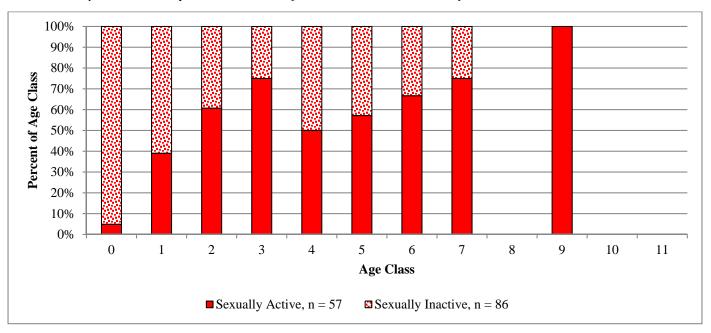
Mean Tail Length ± SE (mm) of 369 River Otter Carcasses Sampled from New Jersey by Sex and Age Class, 2005-2015



Mean Total Length ± SE (mm) of 315 River Otter Pelts Sampled from New Jersey by Sex and Age Class, 2005-2015



### Sexual Activity Based on Corpora Lutea Counts from 143 Female New Jersey River Otters, 2005-2015



Current Bills in the New Jersey Legislature – March 1, 2016

	Jersey Legislature – March 1, 2016
A109	
	Increases membership of Fish and Game Council and clarifies it has sole authority to regulate freshwater
Last Session Bill Number: A138	fishing, hunting, and Trapping.
	Primary Sponsors: Space (24) and Phoebus (24)
	Introduced 1/27/16
	Referred, Assembly Agriculture & Natural Resources Committee.
A122	
	Provides for no net loss of DEP lands for fishing, hunting, and Trapping purposes.
Last Session Bill Number:	Primary Sponsors: Space (24) and Phoebus (24); Co-sponsor: Brown
A2453, S1734	Introduced 1/27/16
	Referred, Assembly Agriculture & Natural Resources Committee.
A 422	
A432	D. 1.1.1.4.
Identical Dill Namban C1200	Prohibits use of snares in Trapping of wildlife.
Identical Bill Number: S1309 Last Session Bill Number:	Primary Sponsors: Eustace (38) Introduced 1/27/16
A4179, S2538	Referred, Assembly Agriculture & Natural Resources Committee.
A4179, 32336	Referred, Assembly Agriculture & Ivalurar Resources Committee.
A723	
11,20	Provides discounted hunting and Trapping license, permit, and stamp fees for senior citizens.
Last Session Bill Number:	Primary Sponsors: DiMaio (23); Co-sponsor: Peterson
A3598, S2327	Introduced 1/27/16
	Referred, Assembly Agriculture & Natural Resources Committee.
A997	
	Provides for discounted resident Trapping license fees for senior citizens.
Last Session Bill Number:	Primary Sponsors: Gove (9) & Rumpf (9)
A2139, S916	Introduced 1/27/16
	Referred, Assembly Agriculture & Natural Resources Committee.
A1157	
	Authorizes free hunting, fishing, and Trapping licenses and free admission to State parks and forests for
Last Session Bill Number: A761	individuals with certain types of military service.
	Primary Sponsors: Rumpf (9) and Gove (9); Co-sponsor: Munoz, Brown, Space
	Introduced 1/27/16
	Referred, Assembly Agriculture & Natural Resources Committee.
A1387	
A1301	Requires voter registration forms be made available when applying for hunting, fishing, or Trapping
Last Session Bill Number:	license.
A2485	Primary Sponsors: Phoebus (24) and Space (24)
300	Introduced 1/27/16
	Referred, Assembly Agriculture & Natural Resources Committee.
A2460	
	Establishes certain requirements for Trapping of snapping turtles.
Last Session Bill Number:	Primary Sponsors: Burzichelli (3)
A2228	Introduced 1/27/16
	Referred, Assembly Agriculture & Natural Resources Committee.
A3049	
	Authorizes free State park and forest admission and free hunting, fishing, and Trapping licenses for
Last Session Bill Number:	persons with certain types of military service.
A2285	Primary Sponsors: Andrzejczak (1), Houghtaling (11), Taliaferro (3) & Land (1)
	Introduced 2/16/16
	Referred, Assembly Agriculture & Natural Resources Committee.

COEC	
S256 Last Session Bill Number: S193	Authorizes free hunting, fishing, and Trapping licenses and free admission to State parks and forests for individuals with certain types of military service.  Primary Sponsors: Connors (9); Co-sponsor: Weinberg, Whelan Introduced 1/12/16  Referred, Senate Environment & Energy Committee.
S472	
Last Session Bill Number: S348 A112	Clarifies that Fish and Game Council has sole authority to regulate freshwater fishing, hunting, and Trapping. Primary Sponsors: Oroho (24); Co-sponsor: O'Toole Introduced 1/12/16 Referred, Senate Environment & Energy Committee.
S485	
Last Session Bill Number: S1734 A2453	Provides for no net loss of DEP lands for fishing, hunting, and Trapping purposes.  Primary Sponsors: Oroho (24) & Bucco (25) Introduced 1/12/16 Referred, Senate Environment & Energy Committee.
S603	
Last Session Bill Number: S325 A2959	Authorizes free hunting, fishing, and Trapping for certain retired military personnel.  Primary Sponsors: Addiego (8) & Bucco (25); Co-sponsor: Van Drew Introduced 1/12/16 Referred, Senate Environment & Energy Committee.
S929	
Last Session Bill Number: S916	Provides for discounted resident Trapping license fees for senior citizens.  Primary Sponsors: Connors (9) Introduced 2/4/16 Referred, Senate Environment & Energy Committee.
S1200	
S1309 Identical Bill Number: A432 Last Session Bill Number: A4179 S2538	Prohibits use of snares in Trapping of wildlife. Primary Sponsors: Vitale (19) Introduced 2/8/16 Referred, Senate Environment & Energy Committee.
A2178	
Last Session Bill Number: A2410 S2492	Removes statutory limitation on number of permits that may be issued by Division of Fish and Wildlife for the taking of Beaver.  Primary Sponsors: Space (24) and Phoebus (24); Co-sponsor: Brown Introduced 1/27/16  Referred, Assembly Agriculture & Natural Resources Committee.
ACR25	
Identical Bill Number: SCR11 Last Session Bill Number: SCR175 ACR250	Determines that Fish and Game Council's proposal to allow use of enclosed Foothold traps is inconsistent with plain language and legislative intent of 1984 law banning animal traps of steel-jaw leghold type.  Primary Sponsors: Singleton (7), Gusciora (15) and Benson (14) Introduced 1/27/16 Referred, Assembly Agriculture & Natural Resources Committee.
SCR11	
Identical Bill Number: ACR25 Last Session Bill Number: SCR175 ACR250	Determines that Fish and Game Council's proposal to allow use of enclosed Foothold traps is inconsistent with plain language and legislative intent of 1984 law banning animal traps of steel-jaw leghold type.  Primary Sponsors: Lesniak (20) and Bateman (16); Co-sponsor: Addiego, Allen, Weinberg, Cruz-Perez, Greenstein Introduced 1/12/16  Referred, Senate Environment & Energy Committee
ACR79  Last Session Bill Number: ACR12	Proposes constitutional amendment to preserve right of people to fish, hunt, Trap and harvest fish and wildlife.  Primary Sponsors: Phoebus (24) and Space (24) Introduced 1/27/16 Referred, Assembly Agriculture & Natural Resources Committee.

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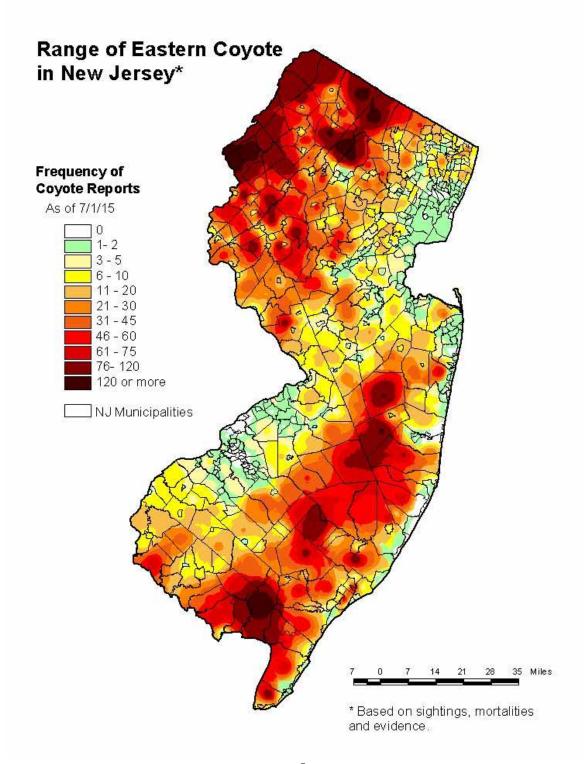
Last Session Bill Number: SCR22, ACR210

Proposes constitutional amendment to preserve right of people to fish, hunt, Trap and harvest fish and wildlife.

Primary Sponsors: Oroho (24) & Van Drew (1); Co-sponsor: Bucco Introduced 1/12/16

Referred, Senate Environment & Energy Committee.

# New Jersey Coyotes: Where aren't they?



# Municipalities with 75 coyote reports\* or more

County	Municipality	Number of Reports			
Cumberland	Maurice River Township	180			
Warren	Blairstown Township	147			
Sussex	Sparta Township	146			
Morris	Jefferson Township	145			
Passaic	West Milford Township	143			
Sussex	Vernon Township	137			
Morris	Rockaway Township	136			
Ocean	Manchester Township	135			
Warren	Knowlton Township	132			
Ocean	Jackson Township	127			
Atlantic	Mullica Township	123			
Warren	Alllamuchy Township	117			
Sussex	Sandyston Township	116			
Warren	Hardwick Township**	112			
Hunterdon	Clinton Township	110			
Warren	White Township	108			
Sussex	Wantage Township	104			
Warren	Mansfield Township	100			
Atlantic	Galloway Township	98			
Cape May	Lower Township	98			
Hunterdon	Union Township	98			
Sussex	Frankford Township	97			
Cape May	Dennis Township	96			
Warren	Hope Township	95			
Hunterdon	Lebanon Township	93			
Hunterdon	Tewksbury Township	93			
Sussex	Stillwater Township	90			
Mercer	Hopewell Township	87			
Sussex	Montague Township	87			
Warren	Washington Township	81			
Atlantic	Hamilton Township	80			
Burlington	Woodland Township	80			
Cumberland	Commercial Township	80			
Ocean	Lacey Township	80			
Cumberland	Downe Township	79			
Warren	Frelinghuysen Township	79			
Sussex	Walpack Township	77			

<sup>\*</sup>total number of reports, all years; includes mortalities, sighting and any other incidents.
\*\*Includes Hardwick and Pahaquarry Townships.

Summary of documented coyote mortalities in New Jersey from July 1, 1991 to March 15, 2016

Fiscal Year	Car	Disease	Bow	Shotgun	Rifle	ML	Box Trap	Cable Restraint	Wildlife Control	Illegal	Unknown	Total
1992	13						-	4			1	18
1993	25	1						6				32
1994	20	1						3		6		30
1995	17							5	1			23
1996	17	1						2			1	21
1997	19	2		2		2		12		1	1	39
1998	26	2	1	8		2	2	5			1	47
1999	25	2		5		1		1			2	36
2000	26	1		5		2		6				40
2001	22	4	5	26		4		6			2	69
2002	27	1	3	16		4		8	1	1		61
2003	36	1	3	56		5		31	1		2	135
2004	22	1	12	56		10		59			2	162
2005	34		9	59		9		46	1		2	160
2006	28	1	18	61		12		85	2		1	208
2007	12		5	51		12		108	6			194
2008	15		11	44		5		90	2			167
2009	16		10	41		12		93	2			174
2010	19		9	65		22		69	4		2	190
2011	11		13	62		11		171	2			270
2012	13		17	57		13		162	8		1	271
2013	22	1	10	38		8		243	2			324
2014	10		17	52	4	7		194	7			291
2015	18	1	12	63	6	10		196				306
2016	9	1	15	48	5	16		161			2	257



### **Furbearer Facts: Delayed Implantation in New Jersey Furbearers.**

Delayed Implantation, also known as embryonic diapause, is a reproductive strategy that over 100 mammalian species share worldwide. Members of the Mustelid family (fisher, mink, otter, skunk and weasel), and Ursidae family (black bears) are classified as delayed implanters and utilize a delayed implantation type called obligate delay. Obligate delay lasts for varying amounts of time – from weeks to nearly a year.

In this reproductive process, embryos temporarily cease developing and do not immediately attach to the uterine wall existing instead as microscopic balls of cells called blastocysts. They free-float in the uterus until the female is physiologically programmed for them to develop. Delayed implantation allows animals to tailor their reproductive cycle to their yearly food and weather cycles, an amazing survival mechanism. Carrying blastocysts around instead of developing fetuses makes the female animals lighter in weight and the ability to move about is greatly increased.

The fisher is the largest terrestrial member of the weasel family in New Jersey. Females are pregnant all year except for about two weeks! Their breeding season is from March through early May, and parturition has been reported from late February through May with most litters produced during March and April. The females

mate again within two weeks of giving birth, delay implantation for 10 months, and then implant the embryo 30 days before the young are born.

The North American river otter is one of only two known otter species to have delayed implantation (the other is the sea otter from the Pacific Ocean). Fertilized eggs will remain in delay for 7 to 10 months before implanting, usually during late winter/early spring months. Once the embryos implant the gestation period is 68 to 73 days. The total resulting pregnancy from date of last breeding to parturition may vary from 302 to 351 days. Young are generally born in March or April.

On the short end of obligate delay are American mink, skunks and weasels. Mink delay implantation one to six weeks. It's uncertain why the delay is short, however two theories have developed. The first is that delayed implantation is an inherited trait and mink are slowly losing it. The second theory is that delayed implantation allows the female to ovulate and conceive while pregnant (superfetation). During breeding season, females mate with multiple males. Superfetation would allow the female's eggs to become fertilized by each individual male that she mated with. Each fertilized egg then would develop to the blastocyst stage and then suspend development until the end of the breeding season. At that point all the embryos implant at the same time so all the young are born at the same time.

Striped skunk cycles are similar to that of mink. Females breeding earlier have the longest pregnancy due to delayed implantation, while those breeding at the end of the season have a shorter pregnancy. So, after implantation, gestation may range from 55 to 77 days with the young born from May to mid-June.

Breeding for both the long-tailed and short-tailed weasels occurs in summer (July – August). Fertilized eggs then delay implantation for 8 to 9 months and 25 to 27 days after implantation the young are born in April or May. However, not all weasels utilize this reproductive technique. The least weasel, which is not native to New Jersey, does not delay implantation although they are similar in appearance and have similar food preferences as their larger relatives.

The American black bear is likely the best known example of mammalian delayed implantation. Black bears mate in early summer (about June), but the embryo will not implant in the uterus until mid-November or December. This allows female bears to feed on the summer and fall bounty without obvious pregnancy. If food is in short supply, which rarely appears to be the case in New Jersey, the female will abort the fetuses. After implantation, their gestation period is 60 to 70 days and the young are born in January or February.

Another type of delayed implantation, facultative delayed implantation, appears largely in rodents, shrews and some marsupials and is triggered by actively nursing young. For instance, a nursing female house mouse which may mate soon after giving birth will not implant new embryos until the current litter has stopped nursing or is removed by other natural means such as predation.

### **New Jersey Fisher Updates!**

Two male fishers were captured both in Warren County (Mansfield and unharmed at their respective capture sites. after being killed by a motor vehicle in



incidentally by trappers this past winter – Washington townships) and were released In addition, a male fisher was recovered Sandyston Township, Sussex County.

These fishers are most likely descendants from New York's earlier reintroduction effort in the Catskill Region, although they may also have come across the Delaware River from Pennsylvania. Fishers have been documented in several of our northern counties, and credible individuals have also reported seeing or hearing them in some southern counties. DNA samples taken from live and dead fisher may provide further insight as to their origin.

There is no open trapping season for fisher in New Jersey and possession of a New Jersey fisher is not permitted. Possession of fishers legally harvested in other U.S. states or Canadian provinces may be possessed if properly documented.

If you encounter a live fisher (or bobcat) captured on your trapline, do not disturb the animal or the set, but immediately notify Fish and Wildlife by calling 877-WARNDEP (877-927-6337).

A Fish and Wildlife technician will provide further instructions. Call the same number for either a dead bobcat or fisher on your trapline; a Fish and Wildlife technician will arrange to pick up the animal. Biological samples will be taken from all bobcat and fisher carcasses. The data collected will be instrumental to understand the status of the species populations. A big "Thank you" to those of you notified us of these captures! We realize that it may be inconvenient for you, but we truly appreciate your cooperation.

The Division's Upland Wildlife and Furbearer Research Project would like to ask anyone who might have trail camera pictures of fishers to share them with us! We hear (usually second or third hand) that quite a few are seen but rarely receive a clear, recognizable photograph to go along with the report. If you have any good quality photos you'd care to share, please send them to Wildlife Technician Joe Garris via email to: <a href="mailto:joseph.garris@dep.nj.gov">joseph.garris@dep.nj.gov</a>

# Please Remember to Report Your Coyotes!



The Division is working on adding coyote reporting to the Automated Harvest Report System. Until such time, please remember that all coyote harvests or depredation kills by farmers must be reported to a New Jersey Division of Fish and Wildlife Regional Law Enforcement office within 24 hours.

Regional NJ Fish and Wildlife Law Enforcement Office phone numbers:

Northern Region Office 908-735-8240 Central Region Office 609-259-2120 Southern Region Office 856-629-0555



# **Bobcat Capture Reporting**

Remember to report any bobcat captures ASAP! Beginning with the 2015-16 Trapping season it became mandatory to report any and all bobcats that were trapped incidentally within 24 hours. However, we would rather you report any bobcat capture (or road mortality) as soon as you find in it! It's important for the animal's survival as well as the general trapping image. A biologist or technician will come and immobilize, tag, take DNA samples and assure that the animal is healthy prior to release.

### The 2015-16 New Jersey Game Code (N.J.A.C. 7:25-5.6) states:

(a) There is a closed season on bobcat. It shall be illegal to intentionally take, kill, or attempt to take or kill a bobcat in the State of New Jersey at any time. Trappers shall report any bobcat incidentally caught within 24 hours of discovery to 1-877-WarnDEP (1-877-927-6337) Bobcat, including any part thereof, legally harvested in other U.S. states or Canadian provinces may be possessed provided they are affixed with a Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) tag from the state or province of harvest.