New Jersey Furbearer Management Newsletter
Winter 2019-2020

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

Important Upcoming Dates:

- Hunter Education courses resume in March. Registration opens in mid-February. Call 877-2-HUNT NJ for schedule and additional information.
- 25 January – 22 February – Application period for Spring Turkey permits.
- Thursday, 9 February – Last day of beaver and otter trapping season
- **Saturday 22 February – Beaver & Otter Check-in 9AM-NOON at Assunpink, Clinton, Flatbrook, Tuckahoe and Winslow WMA as well as Newfoundland Fire Department on Rt. 23 in Newfoundland**
- Wednesday, 15 March – Last day of the 2019-20 trapping season and Special Permit Coyote/Fox season
- Saturday, 28 March – New Jersey Fur Harvesters spring fur collection at Assunpink WMA
- Sunday, 22 March – New Jersey Trappers Association annual fur auction at Space Farms, Beemerville (fur will be collected on Saturday, 21 March)

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:

Coyote and Gray Fox Harvest Reporting

State regulations requires coyotes harvested by trappers and hunters, or by farmers on a depredation permit, be reported via the Automatic Harvest Reporting System (AHRS) no later than 8:00 PM of the day of harvest. If you are unable to access the AHRS by the designated time, you should immediately report the coyote harvest by

telephone to the nearest NJDFW Regional Law Enforcement Office and then register your harvest via AHRS the next day.

We are happy to say that the AHRS is now ready and you may now use it to report your coyote harvest. While not required by the Game Code, the Division would also be greatly appreciative if you would also report any harvest of gray fox due to concerns regarding their population levels and distribution throughout the state. *You do not need to report the harvest of red fox.*

To report either a coyote or gray fox harvest call 1-855-I HUNT NJ (1-855-448-6865), or via your computer or Smartphone at www.NJ.WildlifeLicense.com (see page 55 of the current NJ Hunting and Fishing Digest). To make your report online, select **Report a Harvest** and then click the box to open **Farmer/Non Tag deer and coyote.**

Mandatory 2019-20 Beaver and Otter Check-in

Successful beaver and otter trappers are reminded that the check-in date to register your pelts is Saturday, 22 February 2020 at the usual locations (Assunpink, Clinton, Flatbrook, Tuckahoe and Winslow WMA as well as the Newfoundland Fire Department on Rt. 23). A few things to remember:

- Check station operation hours are **9:00 AM to Noon**
- **Have your data forms completed and remember to bring them** – this will speed things along. If you did not go trapping but had a permit, please remember to return your data form by mail, fax or email!
- If you harvested an otter, remember to bring the carcass.
- If you cannot get to the check-in station personally, it is OK to have a friend check your pelts provided they have all necessary paperwork (completed data form, transportation tags), pelts and otter carcass.
- *If you cannot get to the check-in station personally and cannot find someone else to do so for you*, please call Wildlife Technician Joe Garris at the Northern Region Office (908) 735-7040 or on his cell phone (609) 306-4545 to make alternate arrangements. Alternate arrangements should be scheduled by Friday, 7 February!

Fishers: Some new data on a historically native furbearer.

A 2014 study suggests the possibility that fishers in the northeastern portion of the United States may be undergoing some interesting physiological changes. The study suggests that central and eastern populations of fisher are returning to their historic ranges following decreases due to habitat loss and overharvest experienced in the last 100 to 150 years. Investigations concern whether expanding fisher populations are benefiting from the circa 1800s elimination of large, apex predator communities (i.e., wolf and mountain lion). Fisher, along with fox, raccoon, coyote, bobcat and skunk, is considered a meso-, or mid-sized predator.

The study further suggests that local extinctions of the largest apex predators *'release'* meso-predator populations from direct predation and competition, leading to an increase in the meso-predator population , expansion of their range and possible shifts in their relationships with other animals in their ecological niche. Four geographic regions defined in the study were: Pacific (California, Oregon, Washington and Pacific coast), Northwestern (Montana, Idaho and adjoining Canadian provinces), Central (Minnesota, Wisconsin and Michigan and adjoining southern Canadian provinces) and Eastern (areas east of the Central region to the Atlantic Coast and southward along the Appalachian Mountains to West Virginia and including the satellite population introduced in Tennessee).

The study's comparison of the conservation status and predator communities of fishers across four geographic regions of their range supports the meso-predator release hypothesis, especially in their eastern range. Analysis during the study of fisher diet suggests that released populations may benefit their diverse diets with more large-bodied prey species, whereas those with more specialized diets (such as with the northwestern populations) or diverse diets with small amounts of large bodied prey (such as with populations within California), have experienced little range expansion.

Data comparison to museum specimens suggest that individuals within released populations have evolved a larger body size since the time of their most reduced range, which may help them hunt larger prey species that are expected to be more available in the absence of larger carnivores. Interestingly, these data support the hypothesis that a reduced predator diversity is contributing to the geographic variability in today's fisher range expansion. Future conservation plans should consider the potential effects of the predator community, emphasizing the need to quantify fisher mortality sources and fisher–predator interactions, in addition to harvest restrictions, habitat protection and translocation programs.

Mesopredator release facilitates range expansion in fisher.
Animal Conservation. Print ISSN 1367-9430
S. D. LaPoint, J. L. Belant3 & R. W. Kays

Ticks! Be on the Lookout

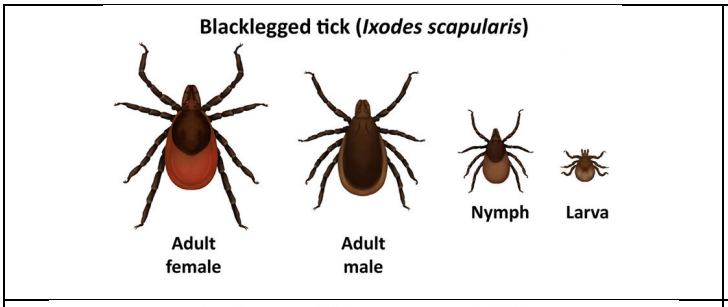
Even during winter, outdoorsmen and women need to be alert and on the lookout for ticks. Ticks are most active when temperatures are above 45º F, but ticks do not go away with the cold of winter, nor do they die because of that cold. A warm winter day may trigger tick activity and people walking in the fields and woodlands might be surprised by ticks ascending the legs or sleeves of their clothing. Trappers and hunters should be aware of the increased possibility of becoming a host when they are handling any harvested animal.

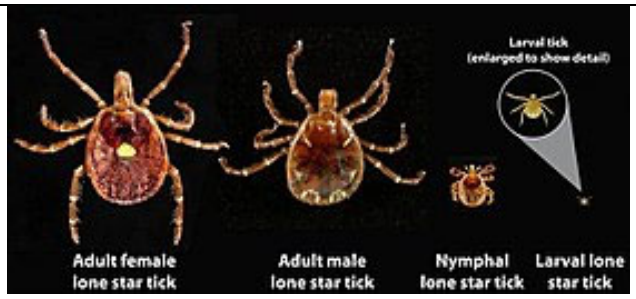
Depending on the species and its life stage, ticks become dormant or latch on to a warm-blooded host. According to the New Jersey Agricultural Experiment Station at Rutgers University, there are three indigenous tick species that transmit diseases in NJ: the blacklegged (deer) tick, the lone star tick and the American dog tick. Although Lyme disease is the most common tick-borne disease in New Jersey, there are other diseases that are carried by ticks, such as anaplasmosis, babesia, ehrlichiosis, Rocky Mountain Spotted Fever and Powassan virus.

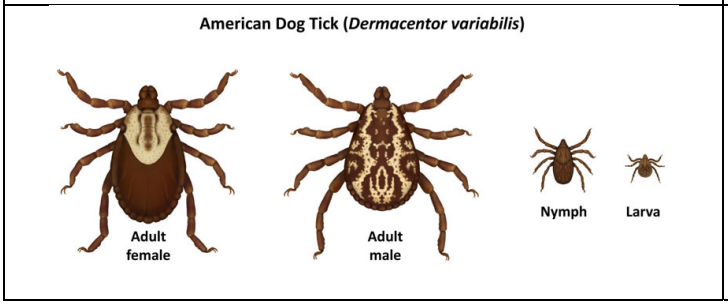
There were 315,613 confirmed Lyme disease cases in the US during 2007-18, according to the Center for Disease Control (CDC). While present in every state except Hawaii, Lyme disease is predominantly a problem in the 13 northeastern states which accounted for 269,169 (85%) of confirmed cases. The top 5 states of Pennsylvania (69,905), New York (39,775), New Jersey (39,539), Massachusetts (29,408) and Connecticut (23,758) accounted for 75% of the northeastern total and 64% of the national total. An average of 3,295 confirmed cases were reported annually in New Jersey.

Data are also available from the NJ Department of Health, which includes probable reports since 2008. According the NJDOH, Lyme disease reports during 2004-18 ranged from 2,432 (2006) to 5,092 (2017) with an annual average of 3,799. The greatest number of yearly cases are usually reported from Morris County, except for 2007 (Sussex), 2014 and 2018 (Monmouth). On a positive note, confirmed and probable cases of Lyme in 2018 dropped 21% to 4,000. Year to year differences in Lyme disease incidence are normal. Variation may be due to how many ticks are around during a given year, which is dependent on weather and available host animals. Other factors include health care reporting and testing, and public health case investigation practices.

If that were not enough, we now have a new tick species, the Asian longhorned tick, to consider (see below, bottom right). This species was first reported in the US from Hunterdon County in 2017, and is known for carrying a virus that is lethal to 15 percent of its bite victims, according to the CDC.





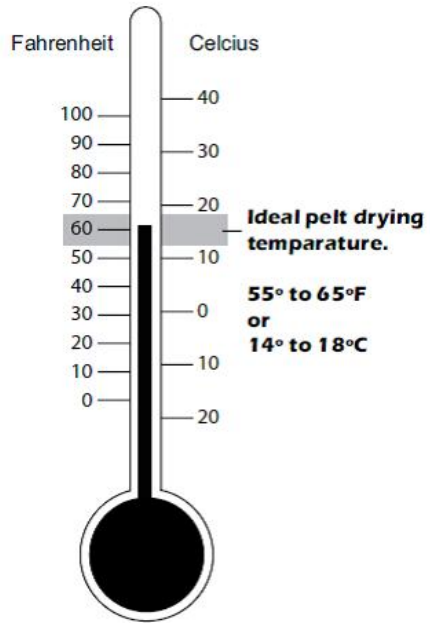


Fur Handling Tips: Avoiding Fleas, Mites and Ticks

It is a good idea to think about the possibility of diseases that ticks, or fleas may carry before handling any furbearer carcasses. Most of us do not think enough about the possibilities of contracting a tick-borne disease when we are handling fur, but is something we need to consider to reduce risk.

If a furbearer is dry, simply brush or comb the pelt to remove any burrs or dirt. However, land furbearers may have external parasites such as fleas, ticks, or mites, so keep the carcasses in a place where they will not contaminate your house, clothing, pets or vehicle. Place the trapped animal in a large plastic bag and spray the inside of the bag containing the animals for about 10 seconds with a good insecticide (one that contains Permethrin for instance). Seal the bag for approximately 30 minutes and air the carcass out before skinning.

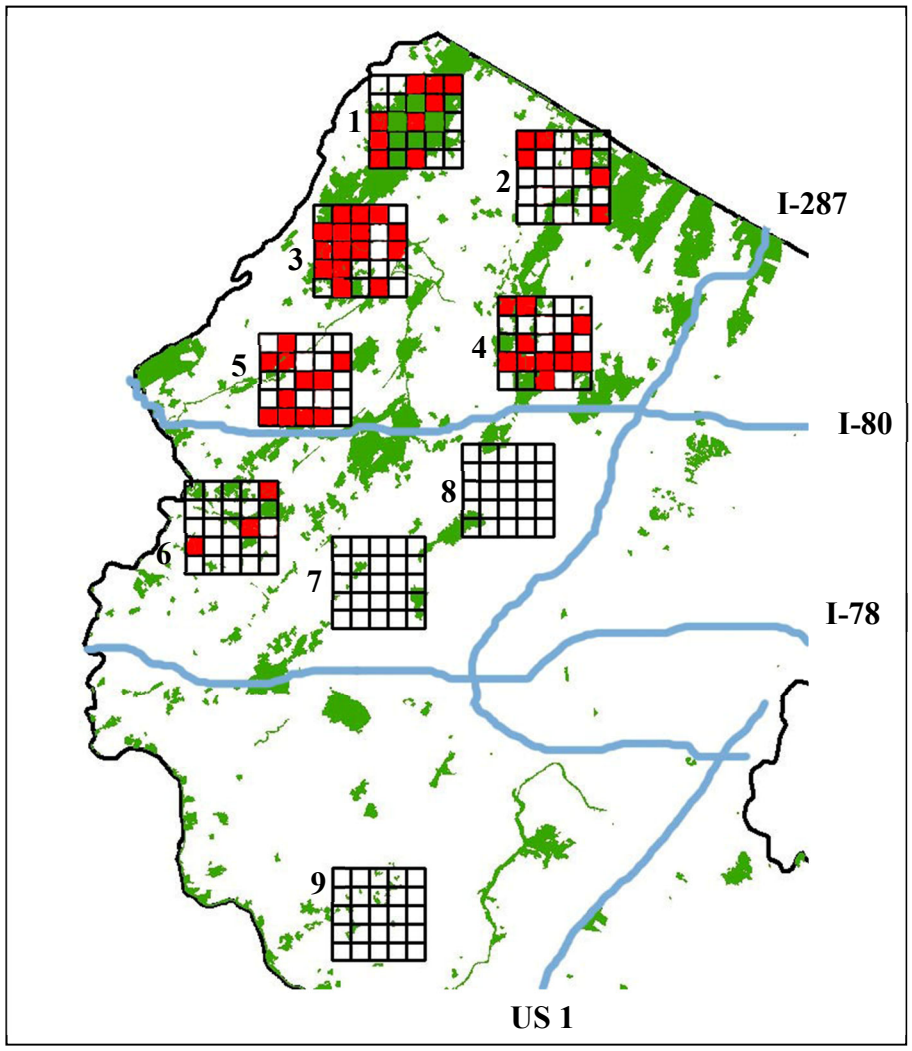
- Wear protective clothing, particularly disposable rubber or plastic gloves, when skinning furbearers.
- Scrub the work area, knives, other tools, and reusable gloves with soap or detergent followed by disinfecting with diluted household bleach.
- Avoid eating and drinking while handling or skinning animals and wash hands thoroughly when finished.
- Safely dispose of carcasses and tissues as well as any contaminated disposable items like plastic gloves.
- It is a good practice to check yourself over carefully when you bathe/shower.



Bobcat Trail Camera and Hair Snare Study, 2019 Results

The research's aim is to develop a population estimate, as well as provide density and occupancy models based on both the grids and on habitats at the sampling sites. Data from this project may also be used to inform predictive bobcat habitat models for New Jersey.

The same 25-km^2 grids used in 2018 were resampled in 2019 (*Left.* Red cells indicate bobcat 'captures'). Trail cameras were again deployed on all sets recording 7,130 videos (see Table 1) including 100 individual bobcats in 140 clips. Videos from the study cameras are being evaluated to determine whether spot patterns of bobcats detected in these videos can be used in a mark-recapture type population analysis. Genetic and video data from the study has been compiled and is being analyzed by a bobcat researcher at University of Maine. Existing additional data collected during previous New Jersey bobcat work (2018), including home range data and habitat use data, will assist the development of a predictive habitat model.



Ten individual fishers were captured in 18 video clips in 2019 compared to 9 individual fishers captured on film in 2018. Hair samples for DNA analysis were also collected. Fishers are relatively new in New Jersey, and this study has added valued information regarding this species distribution.

Hair samples were collected from striped skunk, raccoon, opossum, gray squirrel, black bear, and white-tailed deer in addition to bobcat and fisher. Genetic data from these species will be used for the CHANJ Project (Connecting Habitats Across NJ).

Table 1. Number of mammals captured on 7,130 video clips during 2019[1].

Furbearers (2,389; 33%)	Game Mammals (3,594; 50%)	Non-game Mammals (274; 4%)
Raccoon (1,055)	White-tailed deer (3,141)	Eastern Chipmunk (120)
Red fox (704)	Gray squirrel (269)	White-footed mouse (88)
Virginia opossum (352)	Bobcat (140 by 100 individuals)	Red squirrel (42)
Coyote (162)	Black bear (42)	Flying squirrel (21)
Striped skunk (71)	Woodchuck (2)	Porcupine (3)
Fisher (18 by 10 individuals)		
Gray fox (13)		
Mink (6)		
Weasels (4)		
Beaver (3)		
Muskrat (1)		

[1]Thirty-five (35) bird species triggered cameras 873 times (12%)

Readers are reminded that there is no hunting or trapping season for bobcat or fisher in New Jersey. Only bobcats (including any part thereof) legally harvested in other US states or Canadian provinces may be possessed provided they are affixed with a CITES tag from the state or province of harvest. Fishers have been documented in several northern and southern New Jersey counties.

If you encounter a live bobcat or fisher 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 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.

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.

NEW JERSEY DIVISION OF
Fish and Wildlife

Managing Your Wildlife Resource Since 1892!