West Virginia Division of Natural Resources

Furbearer Management Newsletter

Spring/Summer 2017 Wildlife Resources Section

Welcome back! It's been a full year since the last newsletter and we will try to assure that no issues are skipped in the future. We hope you had a safe and productive furbearer hunting and trapping season and are well on your way to preparing for the next one. Remember, this newsletter is designed with you, the trapper, in mind. So, let us know if we can be of any assistance. Please direct correspondence to: Rich Rogers, WVDNR, 1 Depot St., Romney, WV 26757, Rich.E.Rogers@wv.gov.

Fisher Study to Begin at WVU

West Virginia's fisher population had its foundation in 23 animals reintroduced into Pocahontas and Tucker Counties in 1969. The animals were translocated from New Hampshire into suitable habitats in both counties. Since that time, fisher range has expanded in the state to include areas once not thought of as suitable. In other words, fishers have done quite well.

Since the state's fisher population was initially established with so few individuals, the WVDNR is participating in a project being undertaken by West Virginia University to determine genetic health and diversity of our fishers. A primary goal of DNA analyses will be to determine if there are distinct subpopulations of fishers in the state which would benefit from more intensive management. It will also be determined how viable fisher populations will remain into the future. In general, populations with narrow genetic profiles are not as healthy as they should be otherwise due to the results of inbreeding. In spite of this, our fishers seem to be doing quite well and studies in other states have shown that there is not much genetic diversity in fisher populations across their range in the US.

Beginning with the upcoming trapping season, WVU and WVDNR will be collecting tissues from as many fishers as possible in order to extract DNA. Successful fisher trappers will be contacted and tissues (most likely a tiny piece of hide) will be collected at fur buyers and West Virginia Trappers Association fur sales. Tissue sample will be collected from the next two trapping season ending in 2019.

This fisher was caught in Hampshire County in 2016. Two others, identified by size difference, were caught on trail cameras within 500 yards. At least two others were caught on trail cameras within 3 miles of where this one was caught. This part of the state was not considered suitable fisher habitat when fishers were reintroduced in 1969.

West Virginia Bobcat Research Update

Although field data collection is complete, data analyses for the West Virginia Bobcat Project are still underway with much yet to be done. PhD candidate, Tom Rounsville, is diligently working to make sense of a mountain of DNA data. He is also in the process of developing unique methodology for identifying hundreds of individual animals from hair samples using a

much more simple, yet still sophisticated, technique than has been used in the recent past. This all sounds like alchemy, but spending some time in the lab with Tom is always educational with the result being that any who have done so walk away with more knowledge and a great appreciation for what he is doing.

Following is a project update notice drafted by Tom Rounsville. Keep checking these newsletters for future updates regarding the project.

May 2017 WVDNR Bobcat Project Update

By: Tom Rounsville, Ph.D. Candidate, West Virginia University

Spring has sprung is West Virginia. The birds have returned, the flowers are blooming, and a new generation of bobcat kittens are being raised by their mothers. While this new spring unfolds around us, the WVDNR and WVU bobcat project team is hard at work analyzing the data collected from the 2015 and 2016 hair snare seasons.

First, we would like to thank each and every landowner that allowed us to utilize their property for this important bobcat research project. Without your support, none of this would have been possible. At this time, we would also like to reiterate that once the project has been completed, information will be available to participating landowners as to what was detected on their property. However, many more months of analyses are required to fulfill this final goal for the project. Our hair collection efforts were more successful than expected and now we are actively working to develop a new DNA testing technique to make it possible to analyze the more than 2,500 hair samples that have been collected. In closing, we would like to thank you again for your participation and ask for your patience as the project comes to completion in the coming year. Finally, we would like to leave you with some facts regarding the 2015—2016 bobcat hair snare project sample collection:

- A total of 15,000km^2 of land have been sampled for bobcats—which is roughly 20% of the entire land area of West Virginia
- 24,000 gun brushes deployed
- More than 2,500 individual tufts of hair collected and processed for DNA work
- DNA testing will also provide updated distribution information on other important species such as fisher and black bear

Bobcat rubbing on a deer leg at a bait site set for capturing pictures of eagles in West Virginia. Trying to elicit the same behavior at a hair snare site seems to be an impossible undertaking. This fall, WVDNR biologists and managers in the eastern panhandle will be testing some new ideas and hair snare designs in an attempt to get bobcats to actively deposit hair on hair snares (gun brushes). The previous study relied on passive collection as cats stuck their heads into a cubby.

A bobcat at another eagle bait site. Other pictures show this cat shoving its head completely under the deer carcass to get a bite. The presence of a food cache certainly seems to encourage the cats to drop their guard.

These bobcat kittens were caught on trail camera video at a site known to be frequented by bobcats. Wildlife manager Lee Strawn captured almost a full day of video clips in Hampshire County during spring of 2016.

The kittens behaved like house cat kittens, playing, jumping, wrestling, and annoying their mother seen in the upper right of the picture. The kitten on the left is carrying a chipmunk that the mother brought for them. Like kittens of any species, they preferred to play with it for quite a while before eating it.

Wildlife manager Lee Strawn assisting with DNA extractions from bobcat hair samples in the WVU DNA lab.

Wild Earth Guardians vs USFWS lawsuit on CITES Appendix II Export Program

In 2016, Wild Earth Guardians (WEG) filed a lawsuit against the US Fish and Wildlife Service (USFWS) to require public review of its pelt export program as regulated by the Convention on International Trade in Endangered Species (CITES). Based on their filed comments, it is apparent that their motive is to hinder trapping of species listed by CITES, including bobcat and river otter. One of their claims is that the USFWS has never determined the impact that the export program has on harvest, and thus population stability, of these species.

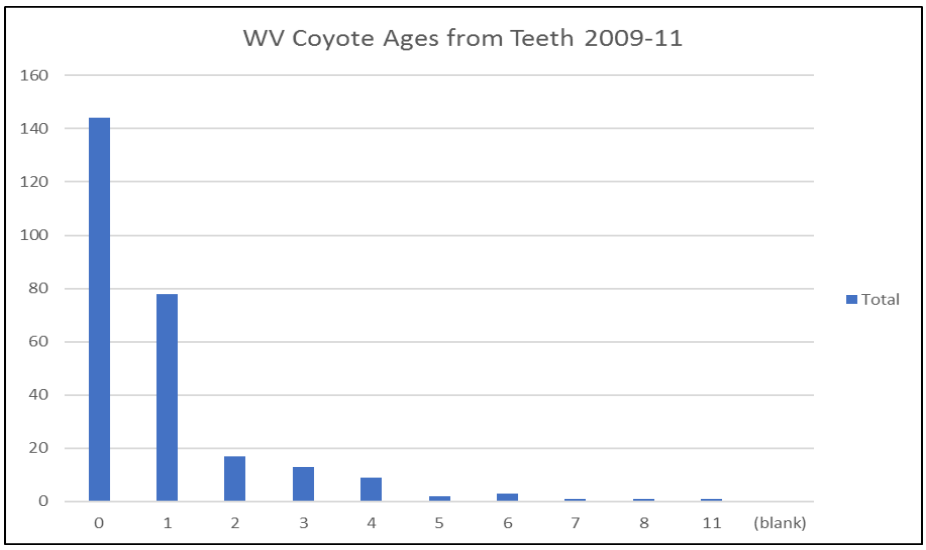
A result of the lawsuit was that USFWS was required to conduct an Environmental Assessment (EA) of the pelt export program. In 2017, West Virginia Division of Natural Resources (WVDNR) provided comments and justification for the program defending itself and forty-nine other state wildlife agencies as adequately and professionally managing covered species.

WEG rejected acceptance of the EA and is moving forward with their lawsuit. Compromising with WEG on this issue will result in weakening of scientific management of affected species as well as making it more difficult to export harvested animals. WVDNR will continue to participate in defense of the USFWS export program as needed.

With all of this in mind, the importance of the recent bobcat research being conducted by WVU and WVDNR cannot be understated. We will also need to increase collection of otter carcasses to collect data for use in population reconstruction to guide and improve otter management. This will become increasingly necessary to defend decisions related to harvest of these animals in West Virginia.

West Virginia Coyotes Facts

Most of you will remember the coyote food habits study conducted by Geriann Albers at WVU several years ago. Coyote teeth were used for aging to determine age structure of the harvested animals as indicative of the wild population in the state. Age structure was typical of coyote populations in this region, showing the population as dominated by young animals under two years old.



Numbers of coyotes by year age class of harvested animals.

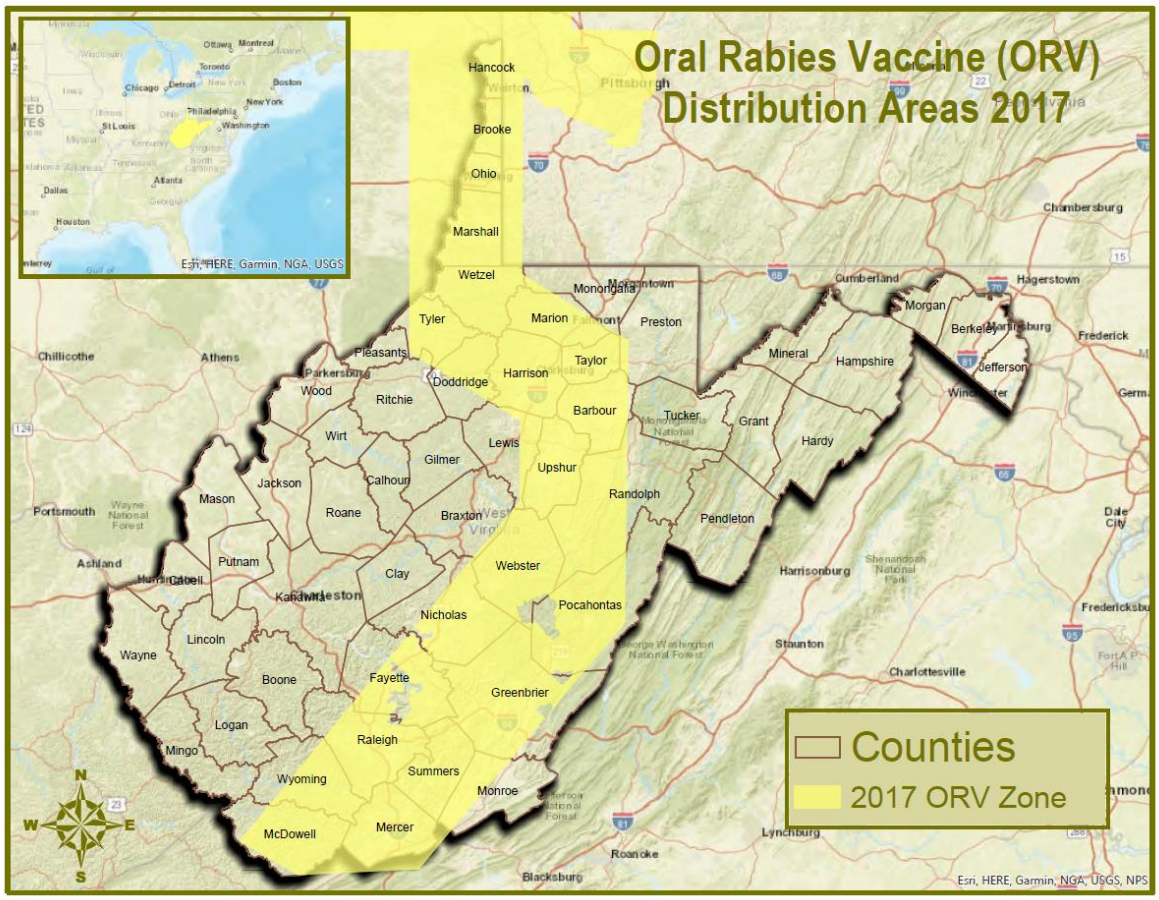
Recently, WVDNR used the same data to determine survival of juvenile and adult coyotes by constructing and calculating what is known in the scientific community as a kill or catch curve. These data indicated that survival of coyotes under a year old was 42%, while that of adult animals was 53%. These are the percentages of animals surviving in an age class to the following year and is probably much lower than the average hunter or trapper would estimate. So, approximately half of the coyotes in any age class do not make it to the next year, including pups.

Based on coyote density studies and estimates in similar habitats in surrounding states, it is estimated that there are between 11,000 and 12,000 coyotes in West Virginia. Densities may be as low as 0.12 individuals/mi.^{2} in poorer habitats such as those found on much of the National Forest lands in the east to 1 individual/mi.^{2} in better habitats in the rest of the state. The average estimate assumes a family unit of an average of five coyotes actively defending a territory of 10 square miles. With approximately 2,000 pelts making it to the fur market each year, this leaves around 4,000 dead animals unaccounted for. Other sources of mortality include disease, predation on pups, accidents, and unreported hunter/trapper kills.

ORV Corridor Report – positive case west of corridor

By now, most are familiar with the USDA oral rabies vaccine program being conducted in the Appalachian corridor. The vaccine laden baits will be distributed from the air in a continued and long term attempt to keep raccoon strain rabies from moving any further west. See the notice below for more information and bait distribution dates.

In spite of best efforts and intentions, two raccoons testing positive for rabies were found this past spring west of a portion of the corridor located further south, one each in Virginia and Tennessee. If these are indeed isolated cases, it is unknown how the animals were exposed. Hunters and others are reminded that moving animals greatly increases risk of exposing healthy wildlife populations to disease. Initial exposure to raccoon strain rabies in raccoon populations has resulted in 80% mortality in some cases.

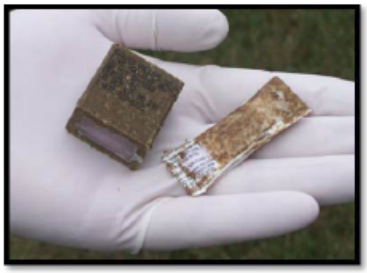


The baiting corridor extends into states to the north and to the south of West Virginia.

NOTICE

ORAL RABIES VACCINATION AREA

The Wildlife Services (WS) program of the U.S. Department of Agriculture's Animal and Plant Health Inspection Service (APHIS) is working with the West Virginia Department of Health to protect people and pets from the threat of rabies in your area. WS is distributing an oral rabies vaccine (ORV) bait to vaccinate raccoons, skunks, foxes, and coyotes and help stop further spread of rabies. ORV baits are about the size of a matchbox and are coated with fishmeal flavoring or a sweet vanilla wax. ORV baits can be distributed by airplane, helicopter, or car.



ORV Baits will be distributed between:

August 21 – September 2, 2017

What if I find rabies baits?

If you find ORV baits, leave them alone, unless they are where children or pets play. To move ORV baits safely, you should:

- Wear gloves or use a paper towel or plastic bag when picking up the baits.
- Toss intact baits into a wooded area or other raccoon habitat.
- Bag and dispose of any damaged baits in the trash.
- Take precautions by practicing proper hygiene – wash with soap and water any skin or wounds that may have come into contact with ORV baits, especially if the bait was damaged.

What if my pet eats the bait?

- **Don't panic!** A few baits are not harmful, though eating a large number may cause an upset stomach.
- Do not risk getting bitten or being exposed to the vaccine by taking a bait away from your pet.
- Check the area for more baits and relocate any remaining baits to a wooded area.
- If your pet eats a bait, avoid your pet's saliva for 24 hours, and wash skin or wounds that may have been licked.

Questions about ORV or bait you have found?

- Call the Rabies Information Line at **(304) 558-5358.**
- Call your local health department at:

Trapper Survey

The importance of participating in the yearly trapper survey to assist in monitoring our furbearer populations cannot be stressed enough. Participation is fairly low considering the number of active trappers in West Virginia. Additionally, it is no longer necessary to use your name or any other personal identifying information on the survey form.

As can be seen below, number of days spent trapping for each successful catch decreased from last year, and five year averages are reflective of what many trappers experience. Long term trends will be indicative of species numbers and, when considered with other furbearer data, will strengthen furbearer management decisions.

West Virginia Trapper Survey						
Species	2012-13 Days/Catch	2013-14 Days/Catch	2014-15 Days/Catch	2015-16 Days/Catch	2016-17 Days/Catch	Ave. since 2011
Beaver	1.4	2.0	2.1	2.2	0.9	1.6
Bobcat	16.6	28.2	25.5	45.9	18.3	20.8
Coyote	7.8	11.9	14.0	16.0	6.4	9.3
Fisher	106.0	21.5	46	46.7	4.0	49.4
Gray Fox	7.5	18.7	21.3	14.4	2.5	13.9
Mink	16.0	25.3	23.4	11.7	24.0	16.6
Muskrat	1.5	2.4	2.3	1.1	3.3	1.9
Opossum	5.2	7.4	4.8	8.6	2.0	5.5
Otter	29.5	26.2	14	93	9.0	22.9
Raccoon	2.3	2.5	2.9	5.3	1.6	2.2
Red Fox	12.3	14.3	9.9	12.3	8.9	12.5
St Skunk	7.1	31.3	29.5	26.3	2.3	19.3

2016-17 Furbearer Harvest and Sales

Fur harvests and pelt prices remained low again this past year. In spite of this, die hard trappers still took to the fields and waters in pursuit of their favorite furbearers.

	Pelts Purchased					
SPECIES	2012-13	2013-14	2014-15	2015-16	2016-17	Shipped 2017
Muskrat	5909	4105	3664	1557	1900	1382
Opossum	2009	2380	1890	707	746	233
Raccoon	18606	13927	11520	4681	3459	873
Mink	476	468	365	192	160	37
Red Fox	1680	3214	3037	1739	1059	316
Gray Fox	1701	1679	1390	667	549	75
Bobcat	1424/1994*	1831/2008*	1805/1971*	573/1430*	732/1339*	90
Beaver	1322/1742*	1052/1713*	871/1107*	303/998*	377/996*	256
Weasel	6	6	14	11	30	29
Skunk	191	332	199	81	49	13
Coyote	1886	2825	2353	1188	1686	1241
Fisher	74/130*	81/147*	90/166*	51/102*	24/91*	7
River Otter	0/192*	0/193*	0/156*	0/109*	0/105*	11

*Number after slash mark is actual harvest as determined from mandatory game check.

WVDNR biologists once again attended West Virginia Trappers Association fur sales collecting data to guide management decisions, assisting with CITES compliance, and discussing current wildlife management issues with trappers and fur buyers.

Wildlife biologist Ethan Barton collecting age and sex data from muskrat pelts at the March 2017 WVTA fur sale. Data is used to monitor health and reproduction of muskrat populations in West Virginia.

Melanistic Bobcat

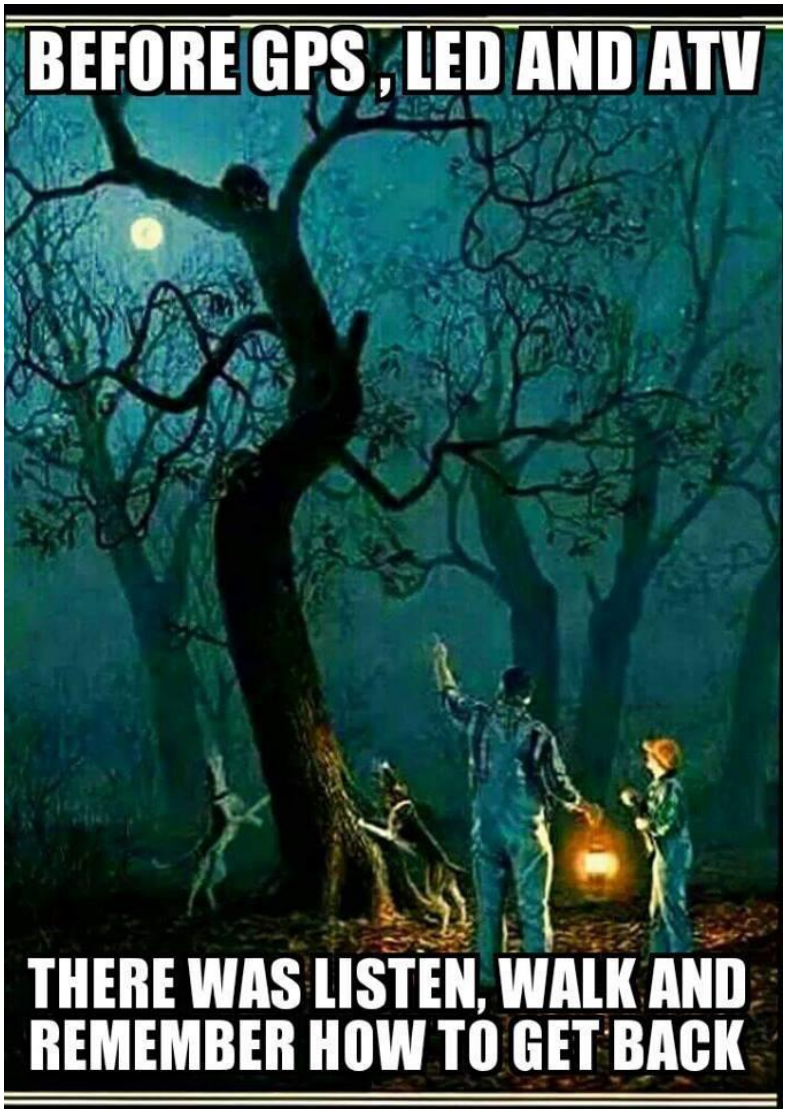
This melanistic bobcat was snared in New Brunswick, Canada on Christmas day this past year. It is only the second such cat ever recorded in Canada. There are only ten other known occurrences recorded in all of North America. Melanism is the result production of higher than normal levels of pigmentation in skin or fur. There is some evidence indicating that melanism in felines may be linked to greater resistance to viral infections common to cats.

Links

West Virginia Division of Natural Resources	www.wvdnr.gov
West Virginia Trappers Association	www.wvtrappers.com
Guide to State Game Depts.	www.identicards.com/links/statednr.html
Assoc. of Fish and Wildlife Agencies	
Furbearer Resources	www.fishwildlife.org/furbearer.html

National Trappers Association	www.nationaltrappers.com
Fur Takers of America	www.furtakersofamerica.com
Conserve Wildlife	www.conservewildlife.org
Furbearers Unlimited	www.furbearers.org
CITES	www.cites.org

Take a kid hunting or trapping!



2017-2018 TRAPPING REPORT FORM
West Virginia Division of Natural Resources
Wildlife Resources Section
Read instructions on back side before completing this report.

Name (*It is not necessary to include your personal information*)_____

Address _____

City _____ **State** _____ **Zip Code** _____ **Phone** _____

SPECIES	County:		County:		County:		County:		County:	
	# OF DAYS TRAPPED	# KILLED	# OF DAYS TRAPPED	# KILLED	# OF DAYS TRAPPED	# KILLED	# OF DAYS TRAPPED	# KILLED	# OF DAYS TRAPPED	# KILLED
Beaver										
Bobcat										
Coyote										
Fisher										
Gray Fox										
Mink										
Muskrat										
Opossum										
Otter										
Raccoon										
Red Fox										
Spotted Skunk										
Striped Skunk										
Weasel										
Other:										

INSTRUCTIONS FOR TRAPPING REPORT FORM

This is a voluntary report that will be used to help West Virginia Division of Natural Resources biologists collect more accurate data regarding trapping success and numbers of animals harvested each year.

1. Fill in your name and full address only if you wish to include this information.

2. Provide your phone number only if you would like to.

3. During the trapping season, fill in columns for # days trapped and # animals killed for **EACH COUNTY** that you trap during the legal trapping season. Two columns are provided for each county. Do not include animals that you release.

4. Use more than one sheet if you trap more than 5 counties.

5. Try to accurately record number of days trapped. If in doubt, give the closest approximation of number of days trapped.

6. Sign and date your data sheet before sending in to:

   Rich Rogers
   Trapper Survey
   West Virginia Division of Natural Resources
   1 Depot St.
   Romney, WV 26757

7. If you have any questions, call Rich Rogers at (304)822-3551.

8. **Send all completed forms in by April 30 of each year.**

9. **DO NOT** include animals caught on Animal Damage Control licenses or on nuisance wildlife permits.