TITLE 312 NATURAL RESOURCES COMMISSION

Regulatory Analysis

LSA Document #24-383

I. Description of Rule

a. History, Background, and Scope of the Rule

312 IAC 9-2-3: The proposed permanent rule changes are needed to allow for the sale of bobcats, including any part of a bobcat, lawfully taken in the state. The General Assembly passed SEA 241-2024, which established a proposed season to take bobcats in the state. Due to this legislative change, trappers need the ability to sell bobcat hides and parts. The proposed permanent rule changes will allow trappers to sell the hides and parts of bobcats.

312 IAC 9-3-9: The proposed permanent rule changes allow an individual to keep a bobcat that is found dead if the individual holds a permit to possess a wild animal found dead from the department of natural resources (department). These changes are consistent with the rules permitting other wild animals that may be kept if an individual finds the wild animal dead. There is not a fee for this permit.

312 IAC 9-3-18.1: The General Assembly passed SEA 241-2024 which requires the department to adopt rules to establish a license to take a bobcat not later than July 1, 2025. Currently, an individual may only take a bobcat with a nuisance wild animal control permit or scientific purposes license under 312 IAC 9-3-18.1.

The bobcat population has expanded during the last two decades, incidental takings have increased with more than one hundred thirty (130) mortalities reported annually since 2010, and the population continues to expand. The department believes the population in the southern part of the state is sufficient to withstand a regulated harvest. There is an increase in the number of bobcats accidentally taken in vehicle collisions and traps set for other species, including coyote and raccoons. Additionally, the number of landowners requesting a permit to take bobcats that are killing livestock increased from fourteen (14) in 2018 to twenty-eight (28) in 2023. There is an increase in costs for businesses and landowners who have experienced loss from bobcats. At this time, an individual may not keep or sell a bobcat that is accidentally captured in a trap set for another species. Allowing individuals to take bobcats by trapping the bobcat will allow trappers to sell the hide and other parts of the bobcat. Because hide prices average one hundred dollars (\$100) per animal, the proposed permanent rule changes give licensed trappers and fur buyers the ability to sell the hides.

Illinois, Kentucky, Michigan, Kentucky, and Wisconsin currently have seasons to take bobcats. Additionally, the counties listed in the proposed permanent rule changes to be open for taking bobcats by trapping are the counties where the habitat analysis done by Purdue University shows good coverage of quality habitats that can support a healthy, self-sustaining bobcat population and regular documentation of bobcats in department records. The department is proposing to have an open season only in those counties where there is a healthy, reproductive population with habitats shown to be able to support the growing bobcat population. There are counties that have suitable habitats, but fewer documented bobcats. The department considers the counties where there are fewer documented bobcats to be emerging bobcat populations; therefore, the department is not proposing to open additional counties to trapping currently.

Figure 1 below shows all documented bobcats since 1970, and Figure 2 below shows public reports of bobcats that are confirmed from the Large Mammal Report (2015–2020) and confirmed or credible on the Report-A-Mammal website through March of 2024.

Figure 1

Bobcat Records 2024



Figure 2

Bobcat Records 2024

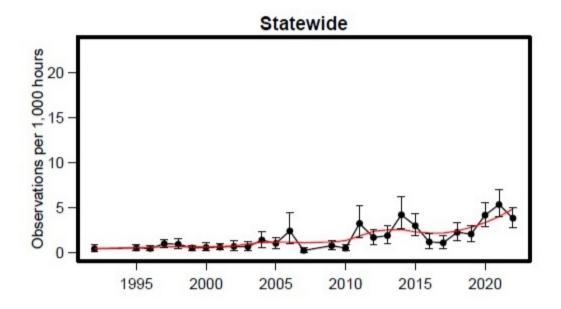




The public assists the department to understand when bobcats may be expanding into new counties by reporting bobcat sightings. Beginning in 2015, the online Large Mammal Report collected reports of bobcat sightings. In 2021, the revamped Report-A-Mammal online report form has collected reports of bobcat sightings. The reports are reviewed by department staff and marked as "confirmed" or "unconfirmed" for the Large Mammal Report, and "Unconfirmed", "Credible", or "Confirmed" for the Report-A-Mammal online report. Reports are confirmed by photographic or video evidence. Credible reports typically have details in the descriptions to support reliable identification.

The Archer's Index is a population trend survey the department uses to monitor population trends. Volunteer bowhunters sign up in advance and report the hours, the county, and each species observed while hunting during the October and early November archery season. The survey began in 1992. Typically, at least two thousand (2,000) and not more than three thousand (3,000) days, and at least ten thousand (10,000) and not more than fifteen thousand (15,000) hours hunted are reported by volunteers. Average bobcat observations on the Archer's Index increased from an average of less than one (1) bobcat seen for each one thousand (1,000) hours hunted in the 1990s, to four (4) bobcats seen for each one thousand (1,000) hours hunted beginning in 2020. The observations on the Archer's Index can be found in Figure 3 below.

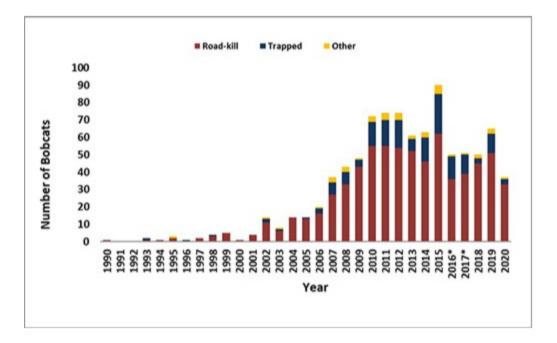
Figure 3



Bobcats were collared and tracked by capturing them in traps in the state during the late 1990's and early 2000's. Collaring occurred in the southern part of the state, primarily in Daviess, Greene, Lawrence, and Martin Counties. Multiple aspects of bobcat life history were collected, including information about survival and mortality. The information was summarized in an American Midland Naturalist publication in 2020.

Motor vehicle accidents are the leading cause of death for bobcats collared for research. Fifty-three percent (53%) of bobcats collared for research were taken because the bobcat was struck by a motor vehicle. The annual bobcat mortality survey conducted until 2020, which found motor vehicle accidents were the leading cause of bobcat mortality in the state, reflects similar percentage. See Figure 4.

Figure 4



Seventy-five percent (75%) of adult bobcats survive from one (1) year to the next, and ninety-five percent (95%) of bobcats less than two (2) years of age survived from one (1) year to the next. The numbers in Figure 4 do not reflect the survival rates of a bobcat less than one (1) year of age, or a bobcat that is at least one (1) year of age and not more than two (2) years of age.

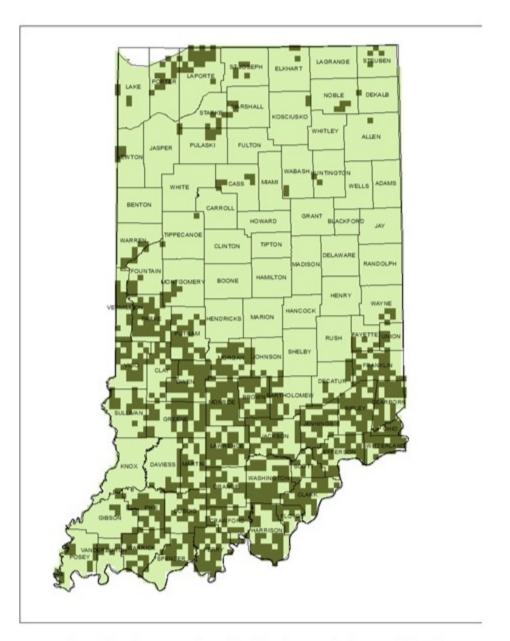
Purdue University also determined bobcat habitat selection and home range size from collaring bobcats.

Bobcats in the state preferred forest edges and somewhat avoided agriculture when selecting habitats.

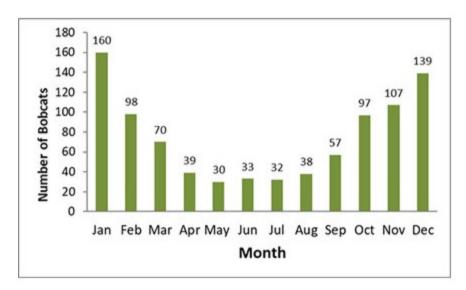
Adult, female bobcats need approximately nine (9) square miles to successfully raise their young. Male bobcats are not monogamous and do not pair with one (1) female bobcat mate, so male bobcat home ranges typically overlap multiple female bobcat habitats and were an estimated ninety-one (91) square miles. The home range numbers are representative of the time beginning in the early 2000s and ending in the mid 2000s when populations in the southern part of the state were still emerging and growing in many areas. The numbers are likely to shift as bobcat populations and densities change.

From this habitat and home range research, Purdue University made a map of the available bobcat habitats, see Figure 5. Figure 5 shows the calculation of the areas that are suitable for an adult, female bobcat to find nine (9) square miles to successfully raise their young. Figure 5 shows a conservative estimate of bobcat habitats. Figure 5 assumes that anywhere that does not provide nine (9) square miles of habitat is not a bobcat habitat. This estimate is calculated based on adult female bobcat needs. However, young bobcats will disperse through other habitats, live in the habitats while waiting for territories to be available, and adult female bobcats will also live in habitats that are less than ideal to raise their young when required to do so. This system is a binary yes or no regarding whether a block is suitable for a bobcat and does not account for the possibility of larger or smaller home ranges, male home range needs, or dispersing bobcats. The dark green squares represent quality habitats of blocks of nine (9) square miles with habitats suitable for adult female bobcats to raise their young.

Figure 5

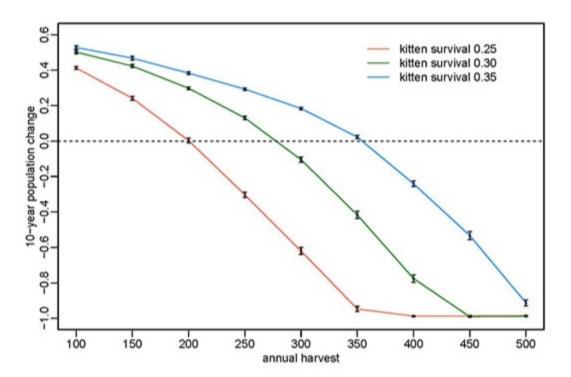


Purdue University researchers developed a population model in the program Net Logo for department staff to utilize should management of a harvest season be required. The population model incorporates the basic aspects of bobcat life history and simulates bobcat population dynamics in the state. The population model is conservative and assumes adult female bobcats do not raise young in habitats less than nine (9) square miles. The population model also assumes existing mortality sources remain at the same level and harvest mortality is added to those mortalities. Figure 6 shows the months when bobcat mortalities were reported on the Annual Bobcat Mortality Survey concluded in 2021. The highest number of mortalities were reported in November, December, and January.



Additionally, Figure 7 illustrates bobcat harvest simulations from the population model at three (3) different levels of survival for bobcats less than one (1) year of age. Any points above the dotted line show a stable to increasing bobcat population. If the points fall below the line, there may be a downward trend in the bobcat population over time.

Figure 7



Purdue University is continuing to collaborate with the department regarding habitat models and will continue to improve and build upon the models with additional data as the data becomes available.

312 IAC 9-3-18.4: The proposed permanent rule changes remove the specified documentation requirements for bobcats since bobcats may be trapped during the season to take a bobcat under 312 IAC 9-3-18.1.

312 IAC 9-10-4: The proposed permanent rule changes add bobcats to the list of species for which a game breeder's license is required. Under IC 14-22-20-1, a game breeder's license is required to propagate in captivity; and possess, buy, or sell wild animals. IC 14-22-20-2 also allows an individual to possess wild animals that are legally taken in an open season to apply for a game breeder's license not later than five (5) days after the last day of the open season for the wild animal. A bobcat may be permitted to be kept alive, and the game breeder's license is required to keep the bobcat in captivity outside the bobcat season. There is only one (1) known bobcat breeder in the state. Currently, a wild animal possession permit is required under 312 IAC 9-11 to possess a bobcat as a pet. It is imperative that bobcats sold in the state are acquired legally and housed in a safe and humane manner. Requiring a license to sell bobcats, which requires documentation of legal acquisition for each wild animal and an annual inspection by a conservation officer, helps ensure the conservation of the bobcat population.

312 IAC 9-10-12: The proposed permanent rule changes remove the references to bobcats to eliminate the need for additional documentation to purchase bobcat hides since bobcats may be legally taken and sold under the proposed permanent rule changes under 312 IAC 9-3-18.1.

b. Statement of Need – The proposed permanent rule changes are the result of a state statutory change under SEA 241-2024 that requires the department to establish a season for taking a bobcat not later than July 1, 2025. The individual bag limit and statewide quota are needed to ensure that the bobcat population remains stable or continues to increase. The changes to 312 IAC 9-2-3, 312 IAC 9-3-9, 312 IAC 9-3-18.4, and 312 IAC 9-10-12 are needed to allow for the legal sale of bobcat hides and parts that are lawfully taken and remove additional requirements for documentation for bobcats in possession or sold to a licensed fur buyer. The proposed permanent rule changes to 312 IAC 9-10-4 are needed to allow bobcats that are acquired legally for sale and to ensure bobcats are acquired legally.

- c. Statutory Authority for the Proposed Rule The department is required to establish a season and license to take a bobcat under IC 14-22-6-17 and has the statutory authority to establish the methods for taking a wild animal under IC 14-22-2-6. The department is also required to develop rules that are based upon the following under IC 14-22-2-6: "(A) The welfare of the wild animal. (B) The relationship of the wild animal to other animals. (C) The welfare of the people.". "Wild animal" is defined under IC 14-8-2-318 and includes mammals. The Natural Resources Commission (commission) has the statutory authority to adopt rules under IC 14-10-2-4.
- d. Fees, Fines, and Civil Penalties The proposed permanent rule changes do not add or increase a fee, fine, or civil penalty. The proposed rule changes add a cross-reference to the location in the Indiana Administrative Code for the fee for a game breeder's license. However, the fee is already established, and the cross-reference is added so the customer knows the location of the fee amount. This is a fee that is already established and is not a new fee.

II. Fiscal Impact Analysis

a. Anticipated Effective Date of the Rule – The anticipated effective date of the proposed permanent rule changes is July 1, 2025. Preliminary adoption with the commission is expected in October 2024. The public hearings are not anticipated to take place until January and February 2025, then final adoption by the commission would not likely take place until May 2025. Final adoption, after review by the Attorney General's Office and Governor's Office, and publishing with the Indiana Register, is likely to be in July 2025.

b. Estimated Fiscal Impact on State and Local Government —The department anticipates there will be no fiscal impact on local government. The department expects approximately two thousand (2,000) trappers to purchase a license to take a bobcat. The anticipated revenue for the license to take a bobcat is approximately thirty thousand dollars (\$30,000) in the first year. The approximate numbers are based on the number of trappers in the state, approximately four thousand (4,000), the open counties, and the number of persons who applied to participate in a similar opening of a bobcat season in Illinois, approximately six thousand five hundred (6,500) persons, of which thirty-five percent (35%) were licensed trappers. No additional fur buyer licenses or game breeder licenses are expected to be sold as the result of the proposed permanent rule changes because there is only one (1) known breeder for bobcats that is issued a game breeder license for other species of wild animals. There are likely not any additional fur buyer licenses to justify the purchase of bobcat hides in the state. There will be some additional administrative costs for department staff, and there will be no costs to local governments.

There are expected to be minimal expenditures out of the Fish and Wildlife Fund (39745) to do administrative work, including updating the website and sending out news releases. Website updates, news releases, and updates to the Hunting and Trapping Regulations Guidebook are part of routine business for the department. Administrative duties are paid for out of the Fish and Wildlife Fund (39745) and are considered part of normal operating costs.

There is not expected to be any significant change in revenue from the proposed permanent rule changes.

c. Sources of Expenditures or Revenues Affected by the Rule –There will be no need for an appropriation because of the proposed permanent rule changes, and no changes in the distribution of revenue because of these proposed permanent rule changes. Administrative work to provide public information about the proposed permanent rule changes will be made through the Division of Fish and Wildlife website, news releases, emails, and the annual Hunting and Trapping Regulations Guidebook, all of which are paid for out of the Fish and Wildlife Fund (39745) and are part of normal operating costs.

III. Impacted Parties

The proposed permanent rule changes will affect approximately two thousand (2,000) licensed trappers. Landowners and other residents that have experienced damage from bobcats to their livestock will likely be helped indirectly by allowing bobcats to be taken in counties with open trapping during the season to take a bobcat.

IV. Changes in Proposed Rule

The primary benefits are to individual trappers who will be able to trap bobcats and sell their hides, and other parts of the bobcat. A bobcat sells for approximately one hundred dollars (\$100) and can be higher depending upon the world market for hides. Licensed fur buyers will be directly affected because they buy and sell bobcat hides and, depending on their location, may have more hides to sell. Licensed taxidermists may also see an increase in business. Bobcats legally harvested in other states are already allowed to be taxidermied, and taxidermists will likely see an increase initially when hunters or trappers harvest their first bobcat in the state. Indirect benefits are to those who have livestock taken by bobcats. Trapping equipment vendors may see a slight increase in sales from trappers in the newly opened counties obtaining some additional equipment and lures or baits to trap bobcats.

312 IAC 9-2-3	Direct Effects	Indirect Effect	Fiscal Impact to DNR	Business Impacts
Allows any portion of a bobcat to be sold	Trappers may sell hides and other parts of bobcats that are trapped lawfully	Landowners who have experienced losses of domestic animals from bobcats	None known	Businesses may sell lawfully acquired bobcat pelts and other parts
Makes technical and conforming changes under the Administrative Rules Drafting Manual	Puts the current rules into compliance with the Administrative Rules Drafting Manual	The language is clearer and more consistent	None known	None known
312 IAC 9-3-9	Direct Effects	Indirect Effect	Fiscal Impact to DNR	Business Impacts
Allows bobcats to be picked up if found dead and kept under a permit issued by department staff	dead bobcat and want	None known	May cause more permits to be issued each year	May increase the number of bobcats taken to taxidermists

Subsection (a)(1)	Deer and white-tailed	None known	None known	None known
removes changes	deer are used			
"white-tailed deer" to	interchangeably under			
"deer"	312 IAC 9			
	Because white-tailed			
	deer are the only			
	species of wild deer			
	found in Indiana, the			
	rule language removes			
	"white-tailed" as extra			
	words			
Subsection (b)(4)	Clarifies the current	None known	None known	None known
clarifies that a	practice of the	Current practice		l .
conservation officer	department for who a			
may designate a law	conservation officer			
enforcement officer with	may appoint to issue a			
another law	permit to possess			
enforcement agency to	certain wild animals			
issue a permit to				
possess certain species				
of wild animal				
Makes technical and	Puts the current rules	None known	None known	None known
conforming changes	into compliance with	Current practice		
under the	the Administrative			
Administrative Rules	Rules Drafting Manual			
Drafting Manual				
312 IAC 9-3-18.1	Direct Effects	Indirect Effect	Fiscal Impact to	Business
			DNR	Impacts

			DNR	Impacts
312 IAC 9-3-18.4	Direct Effects	Indirect Effect	Fiscal Impact to	Business
Drafting Manual				
Administrative Rules	Rules Drafting Manual			
under the	the Administrative			
conforming changes	into compliance with	Current practice		
Makes technical and	Puts the current rules	None known	None known	None known
changed in 2022				
26-1 which was				
person under IC 14-22-				
a registered or licensed				
possess a live bobcat to	with the Indiana code			
changes who may	language consistent	Current practice		
Subsection (o)(5)	Makes the rule	None known	None known	None known
				counties open
				additional
		open to trapping		new trappers in
		counties that are		revenue due to
		trappers in		have additional
		additional sales to		vendors may
		may have		equipment
		equipment vendors		Trapping
		Trapping		on
		to work on		bobcats to work
		have more bobcats		have more
		Taxidermists may		Taxidermists may
state	the state	pelts		buy and sell
southern counties of the	125-15-14	additional bobcat	51 0 950 1	bobcat pelts to
by trapping in forty (40)		have access to	dollars (\$30,000)	have more
Allows taking a bobcat	Trappers may take	Fur buyers may	Thirty thousand	Fur buyers may

		1	Y	
Removes requirements	Individuals who take	None known	None known	Reduces the
for additional	bobcats in other states			paperwork
documentation to	as well taxidermists			required to sell
possess or sell a bobcat	and others who sell			bobcat pelts or
or their parts	them			their parts
Makes technical and	Puts the current rules	None known	None known	None known
conforming changes	into compliance with	Current practice		
under the	the Administrative			
Administrative Rules	Rules Drafting Manual			
Drafting Manual				
312 IAC 9-10-4	Direct Effects	Indirect Effect	Fiscal Impact to	Business
			DNR	Impacts
Adds bobcats to the list	Individuals who want	Helps prevent	Insignificant; current	Additional
of species for which a	to sell bobcats in the	illegal take and	breeder already has	paperwork
game breeder's license	state	sale from the wild	a license for other	required to breed
is required			species	and sell bobcats
				The license costs
				thirty dollars
				(\$30) per year to
				sell them and
				only one known
				offiny office Killowiff
				breeder is in the
Subsection (a) Adds	Clarifies the required	None known	None known	breeder is in the
Subsection (a) Adds	Clarifies the required items found on the	None known Current practice	None known	breeder is in the state
19 (0.5%) (10 (10 (10 (10 (10 (10 (10 (10 (10 (10			None known	breeder is in the state

			i	1
Subsection (u) adds a	Provides those who	None known	None known	None known
cross-reference to the	read the rule with the	Current practice		
game breeder's license	exact location of the			
fee under <u>312 IAC 1.5-</u>	fee for a game			
4-11	breeder's license in the			
	Indiana Administrative			
	Code			
Makes technical and	Puts the current rules	None known	None known	None known
conforming changes	into compliance with	Current practice		
under the	the Administrative			
Administrative Rules	Rules Drafting Manual			
Drafting Manual				
312 IAC 9-10-12	Direct Effects	Indirect Effect	Fiscal Impact to	Business
			DNR	Impacts
Removes additional	Fur buyers will not	None known	None known	Less paperwork
da aum antatia a la auta d	pood to boyo			will be required
documentation required	need to nave			will be required,
for bobcats	additional			which may save
	additional			which may save
	additional documentation to	None known	None known	which may save
for bobcats	additional documentation to purchase bobcat pelts	None known Current practice	None known	which may save money and time
for bobcats Subsection (c) Adds	additional documentation to purchase bobcat pelts Clarifies the required items found on the		None known	which may save money and time
for bobcats Subsection (c) Adds application	additional documentation to purchase bobcat pelts Clarifies the required items found on the		None known	which may save money and time
for bobcats Subsection (c) Adds application requirements for a fur	additional documentation to purchase bobcat pelts Clarifies the required items found on the application for a fur	Current practice	None known None known	which may save money and time
for bobcats Subsection (c) Adds application requirements for a fur buyer's license	additional documentation to purchase bobcat pelts Clarifies the required items found on the application for a fur buyer's license	Current practice		which may save money and time None known
for bobcats Subsection (c) Adds application requirements for a fur buyer's license Makes technical and	additional documentation to purchase bobcat pelts Clarifies the required items found on the application for a fur buyer's license Puts the current rules	Current practice None known		which may save money and time None known
for bobcats Subsection (c) Adds application requirements for a fur buyer's license Makes technical and conforming changes	additional documentation to purchase bobcat pelts Clarifies the required items found on the application for a fur buyer's license Puts the current rules into compliance with	Current practice None known		which may save money and time None known

V. Benefit Analysis

- a. Estimate of Primary and Direct Benefits of the Rule The direct benefits of the proposed permanent rule changes are that trappers may trap bobcats in forty (40) counties in the state and may sell hides and other parts of the bobcats.
- b. Estimate of Secondary or Indirect Benefits of the Rule Indirect benefits of the proposed permanent rule changes are described above and include landowners who live in the counties that are open for taking bobcats and have livestock and other domestic animals. Taxidermists may be indirectly affected by having additional bobcat hides to work on. Fur buyers and trapping equipment vendors will also be indirectly affected by having more bobcat pelts to purchase or additional equipment sales in these counties.
- c. Estimate of Any Cost Savings to Regulated Industries There will be no cost savings for trappers due to the proposed permanent rule changes. There will be a cost savings for fur buyers who will not have to keep as much documentation for bobcat pelts purchased.

VI. Cost Analysis

- a. Estimate of Compliance Costs for Regulated Entities Trappers will need a license to take a bobcat under in IC 14-22-12-1 to trap a bobcat. An individual who holds a game breeder's license may have a few additional administrative costs to keep the required paperwork to breed and sell bobcats.
 Outside of these requirements, there are no new costs for regulated entities to comply with the proposed permanent rule changes.
- b. Estimate of Administrative Expenses Imposed by the Rules There is expected to be only minimal expenses for licensed game breeders to comply with the addition of the bobcat to the game breeder's license. There is also expected to be additional expenditures out of the Fish and Wildlife Fund (39745) for administrative work, including updating the website and sending out news releases. Website updates, news releases, and updates to the Hunting and Trapping Regulations Guidebook are part of routine business. Administrative duties are paid out of the Fish and Wildlife Fund (39745) and are part of normal operating costs.
- c. The fees, fines, and civil penalties analysis required by IC 4-22-2-19.6 –The rules do not add or increase a fee, fine, or civil penalty.

VII. Sources of Information

a. Independent Verifications or Studies - The number of licensed trappers was obtained from the

number of trappers that purchase trapping licenses from the department. The bobcat habitat model was

developed by Purdue University. The number of expected trappers is based upon data from Illinois

regarding how many people trapped bobcats the first year Illinois had a bobcat season.

Additional studies relied upon are as follows:

Jones LR, Johnson SA, Hudson CM, Zollner PA, Swihart RK (2022) Habitat selection in a recovering

bobcat (Lynx rufus) population. PLoS ONE 17(8): e0269258.

https://doi.org/10.1371/journal.pone.0269258

Jones, Landon R., Zollner, Patrick A., Swihart, Robert K., Godollei, Emily, Hudson, Cassie M. and

Johnson, Scott A. Survival and Mortality Sources in a Recovering Population of Bobcats Lynx Rufus) in

South-central Indiana, American Midland Naturalist, 184(2): 222-232

b. Sources Relied Upon in Determining and Calculating Costs and Benefits -

The benefits and costs of the proposed permanent rule changes were obtained from staff of the division of

fish and wildlife of the department.

VIII. Regulatory Analysis

IC 14-22-6-17 requires the department to adopt rules to establish a season to take a bobcat not later than

July 1, 2025. Trappers will be able to harvest bobcats in the state, allowing them to sell their hides and

parts. Landowners and businesses who have experienced loss of domestic animals will benefit from an

expected reduction in the bobcat population with the opening of the season to take bobcats by trapping.

The department believes that with the expected benefits for trappers and fur buyers, and few

administrative costs for the department, the proposed permanent rule changes are warranted.

Notice of First Public Comment Period with Proposed Rule: 20241009-IR-312240383FNA

Notice of Determination Received: July 30, 2024

Posted: 10/09/2024 by Legislative Services Agency