



RECOMMENDED BEST MANAGEMENT PRACTICES TO ADDRESS POSSESSION, TRANSPORTATION AND DISPOSITION OF RABIES VECTOR SPECIES

Prepared by:

Furbearer Working Group
of the
Wildlife Resources Committee

These recommendations were prepared by the Furbearer Working Group of the Wildlife Resources Committee for the Southeastern Association of Fish & Wildlife Agencies. This document is not intended to be a binding document, but provides technical information and recommendations for consideration in establishing policies regarding the possession, transportation and disposition of rabies vector species. This document was adopted by the Wildlife Resources Committee on October 19, 2014 in Destin, Florida and was subsequently adopted by the SEAFWA Board of Directors on October 18, 2016 in Baton Rouge, Louisiana.

Best Management Practices (BMP) for Rabies Vector Species

SEAFWA Furbearer Working Group (FWG)

Charge: The SEAFWA Directors asked the FWG to develop BMPs to address the translocation and release of rabies vector species by Wildlife Damage Control Agents (WDCAs). The SEAFWA Directors also asked the FWG to address the possession, transportation, and disposition of rabies vector species by wildlife agency personnel, wildlife rehabilitators, general public, and hound training facilities and to provide a state-by-state summary of state laws and regulations (Table 1).

For the purposes of this charge, rabies vector species will be limited to raccoon, foxes, skunks, coyotes, and bats. These species are the primary reservoirs for the important rabies strains currently found in the U.S. We acknowledge that some of these species may not be considered a “rabies vector species” in certain SEAFWA states due to the absence of a specific rabies variant (e.g., skunk, raccoon).

Background: The widespread presence of the raccoon strain of rabies in the mid-Atlantic region was accurately traced to both the legal and illegal movement of infected raccoons from Florida to other states during the 1970s. For example, from 1976 to 1978, rabid raccoons were found in shipments of raccoons to a hunting club in North Carolina; these raccoons exposed other raccoons that had already been released into the wild by hunters. During the early 1990’s, an epizootic in central New York was determined to be caused by illegal movement of infected animals from a rabies endemic area. In 1994, six hounds in Florida died due to the coyote variant of rabies. The source of the infection was the translocation of infected coyotes from Texas to a Florida fox enclosure. The Alachua County Public Health identified 102 dogs, 10 cats and 26 people that were potentially exposed to the infection.

The movement and possession of rabies-vector species is an important concern for two reasons: 1) immediate threat to the health of humans, pets, and wildlife populations where the disease is present, and 2) movement of the disease to areas currently free of rabies. In 1990, due to concerns about disease risks to native wildlife, domestic animals and human health, the International Association of Fish and Wildlife Agencies (IAFWA) approved Resolution No. 9 which urged states to adopt regulations that prohibited the importation or interstate movement of foxes or coyotes for the purpose of hunting inside or outside canid enclosures.

In 1998, The Wildlife Society’s Wildlife Damage Management Working Group (WDMWG) published a position statement on the translocation of wildlife in which they made several recommendations. These included the following:

- Minimize or eliminate translocation of wildlife by the wildlife control industry and general public.

- Translocation of nuisance raccoons, foxes, or skunks is inadvisable due to the threat of disease and parasite transmission.

To address concerns and financial costs (estimated at \$60 million per year) associated with the raccoon-strain of rabies, USDA-Wildlife Services has been distributing oral rabies vaccine (ORV) baits since 1997 in the Appalachian Mountains, stretching from Maine to Alabama (15 states). However, movement of animals by various user groups severely threatens the efficacy of this program in protecting those states which remain free from this disease.

Every year, there are numerous examples of people being exposed to rabies due to the direct handling and/or movement of a live animal. A few examples are listed below:

- In 1996, a rabid fox within a canid enclosure bit several dogs and the owner in Beaufort County, North Carolina. The fox had been trapped outside the enclosure and placed within it for the purposes of hound-training. No records were available indicating capture location of the fox or the names of hunters who had trained their hounds within the enclosure with the rabid fox.
- In June 2012, a juvenile raccoon tested positive for rabies in Winston County, AL, an area of western Alabama where raccoon variant rabies had never been detected before and located approximately 70 miles west of the ORV zone. It was determined that the rabid raccoon was one of 4 littermates removed from an attic in Baldwin County, some 200 miles south of the case. More than 20 people had to receive post-exposure prophylaxis as a result.
- In March 2013, a kidney recipient in Maryland died from rabies 18 months after transplantation. After investigation, it was determined that the organ donor (deceased August 2011) had lived in North Carolina and, during that time, kept two raccoons as pets and had used live raccoons as bait during hound training exercises.

Finally, the question of liability must be addressed. WDCAs, rehabilitators, and trappers may be subject to liability if an animal they moved caused a person, their pet, or their livestock to be exposed to rabies or another disease. State agencies may be held liable for allowing these persons to possess and move rabies-vector species. In addition, rehabilitators have additional liability risks associated with potential disease exposure due to the close contact their workers and volunteers have with rabies-vector species, as well exposure of rabies to non-rabies vector species also held in the same facility. Regulating agencies need to be aware of these issues when formulating laws and policies regarding handling of rabies vector species.

It is difficult for much of the general public to understand the ramifications of moving one infected animal into uninfected range. Strong policies and public relations programs are needed to ensure that movement of infected animals is minimal. Cooperation among states is necessary to achieve this goal.

States Summary: As can be seen in Table 1, state laws regarding possession, transportation, and disposition of rabies vector species vary by state and by user group. We attempted to minimize the differences by limiting responses to predetermined categories. Since regulations and laws pertaining to transportation of rabies-vector species were the same as possession requirements, we combined transportation into the possession category on Table 1 to reduce duplicity.

1. Agency Staff. Generally, there are few restrictions on wildlife agency personnel, likely because wildlife agency personnel are allowed to handle wildlife, including rabies-vector species, in the course of fulfilling their duties and responsibilities (e.g., research). While most agencies have no restrictions regarding the handling of rabies-vector species, typically possession is only temporary and most situations result in euthanasia or release at capture site.
2. General Public. Possession and transportation by the public is illegal in 7 of 14 responding states (50%); in these states the disposition method required is either euthanasia or releasing the animal at the capture site. Of the 7 states that allow the public to possess and transport rabies-vector species, 3 states do not restrict the public from keeping rabies-vector species permanently.
3. Wildlife Damage Control Agents. The most consistency among states is found in laws regarding wildlife damage control agents. Only 2 states have no laws or regulations regarding possession, transportation and disposition of rabies-vector species. Only 5 of 14 states require that release be at the original site of capture; the remaining 9 states allow animals to be relocated for final disposition.
4. Rehabilitators. It is illegal in only 2 states (14%) for wildlife rehabilitators to have rabies vector species in possession at any time. In the remaining 12 states (84%) rehabilitators can possess rabies-vector species either temporarily or by permit. Ten of 12 states allow rehabilitators the option to release rabies-vector species away from the original capture site.
5. Trappers Supplying Hound Enclosures. In 4 states (29%) it is illegal to possess rabies vector species for release into hound training enclosures. In 7 states, trappers are allowed to supply foxes and coyotes, while 2 states allow only foxes. One state allows trappers to possess and supply all rabies vector species for hound enclosures. Disposition is inconsistent and vague between states in this category.

Recommendations: It is the considered opinion of the FWG that states are attempting to prevent the spread of rabies. However, weaknesses exist in the final disposition of the animal, with many states allowing user groups to release rabies-vector species away from the original site of

capture. And state laws and regulations vary greatly on the legality of transporting of rabies-vector species across state lines. This allows for both intra- and inter-state movement of these species and the possibility of disease exposure to otherwise healthy wildlife populations.

The FWG recommends the following Best Management Practices (BMPs) for various user groups:

- ***BMP for Disposition of Rabies-Vector Species for Wildlife Damage Control Agents***

State wildlife agencies should require all defined rabies-vector species captured by wildlife damage control agents (WDCAs) and animal control officers (ACOs) be released at capture site or humanely euthanized. No wildlife, including nuisance wildlife, should be relocated or translocated by WDCAs or ACOs.

- ***BMP for Disposition of Rabies Vector Species for Wildlife Rehabilitators***

Rehabilitation of rabies-vector species should not be permitted, but if allowed, vaccinations should be required for all people handling animals. Rabies-vector species should be held in facilities that prevent cross-contamination with other animals, including both wildlife and domestic species. Animals must be released at site of capture or, if not possible, within county of capture. Additionally, if rehabilitators are allowed to handle rabies vector species, animals must be injured or orphaned and not healthy animals.

- ***BMP for Disposition of Rabies Vector Species for Trappers***

All rabies-vector species captured by trappers should be euthanized or released at the site of capture. If states allow trappers to supply rabies-vector species to hound enclosures, trappers should be required to supply species only to licensed facilities within their state. Hound enclosures should obtain species from the local area and be required to maintain records on the number and date of animals acquired for release by species, county of origin, name of person transferring animal, all field trial dates and hunts, participants, and number of hounds released into enclosure. The importation or exportation of foxes and coyotes across state lines should be prohibited.

- ***BMP for Disposition of Rabies Vector Species for the General Public***

All rabies-vector species captured or handled by the general public should be euthanized or released at the site of capture. If rehabilitation of rabies-vector species is allowed, only orphaned or injured animals should be held at rehabilitation facilities; healthy animals should be released at the site of capture or euthanized.

Table 1. Summary of state laws and/or regulations regarding the possession, transportation and disposition of rabies-vectors species (i.e., raccoons, foxes, coyotes, skunks, bats). Note: Texas regulatory staff was unable to provide a response in time for submission of this report.

Codes: **euth**=euthanize, **ilgl**=illegal, **no restr**=no restrictions, **p**=with permit, **restr**=restricted, **rstate**=release in state, **rcty**=release in county where obtained, **rrehab**=release in county where rehabbed, **rs**=release at site, **temp**=temporary

	Agency Staff		General Public		Wildlife Damage Control		Rehabilitators		Trappers ¹	
	Possess	Dispose	Possess	Dispose	Possess	Dispose	Possess	Dispose	Possess	Dispose
AL	temp	euth or rsite	ilgl	rsite	temp	euth or rcty	temp	euth or rsite	ilgl	ilgl
AR	no restr	no restr	no restr ²	no restr ²	no restr	no restr	no restr ³	rcty	p ⁴	restr ⁴
FL	no restr	no restr	p ⁵	euth ⁶ or rcty	temp ⁶	euth ⁶ or rcty	temp or p ⁷	euth, rstate, or p ⁷	ilgl	ilgl
GA	no restr	no restr	ilgl	euth or rsite	temp	euth	temp	euth	temp ^{4,8}	temp ^{4,8}
KY	no restr	no restr	p	euth, rehab or p	temp ⁷	euth or release ¹⁰	temp & p	euth, rstate, or p ¹¹	p ¹²	p ¹²
LA	no restr	no restr	temp or p	euth or rstate ¹³	temp or p	euth ¹⁴ , rstate ^{13,15} or rehab ¹⁵	temp	rcty	temp ⁴	restr ⁴
MS	no restr	no restr	ilgl	euth or rsite	temp	euth ¹⁶ or rstate	temp	rstate	temp ⁴	restr ⁴
MO	no restr	no restr	ilgl	rsite	ilgl	euth or rsite	no restr	rrehab	temp ⁴	restr ⁴
NC	no restr	no restr	ilgl	euth or rsite	temp	euth or rsite	ilgl	ilgl	temp ⁴	restr ⁴
OK	no restr	no restr	ilgl	rsite	temp	euth or rstate	no restr	euth or rstate	ilgl	ilgl
SC	no restr	no restr	restr ¹⁷	euth or rsite	no restr	euth or rsite	restr ¹⁸	rsite or rcty	temp ⁴	no restr ⁴
TX										
TN	no restr	euth ¹⁹ or rcty	temp	euth ¹⁹ or rcty	temp	euth ¹⁹ or rcty	p ⁷	rcty	ilgl	euth or rsite
VA	temp	euth or rstate	temp	euth or rehab	temp	euth	temp	rrehab	temp ²⁰	restr ²⁰
WV	temp	euth or rsite	ilgl	euth	temp	euth or rsite	ilgl	ilgl	restr ²⁰	rcty

¹only when supplying coursing pens w/live animals

² skunks cannot be kept permanently, but can be released elsewhere

³ Rehabilitators working with bats, skunks and foxes must have rabies vaccination

⁴foxes and coyotes only

⁵raccoon highly restricted;

⁶bats cannot be euthanized and must be released at capture site

⁷permit needed for permanent possession

⁸ can transport coyotes and foxes out of state

⁹ 48 hrs. only

¹⁰ release in suitable habitat; does not specify it has to be in KY

¹¹ keep with permit if non-releasable

¹² captive wildlife permit needed & trappers cannot sell, just give

¹³ written permission of property owner where animal is released is required

¹⁴ euth. required for skunks, coyotes, and raccoons

¹⁵ If bats are healthy, must release in state. If bats are unhealthy, must bring to a rehabilitator or dispatched according to AVMA

¹⁶ Euthanasia allowed on case by case basis only.

¹⁷ no live fox or coyote possession without permit

¹⁸ Skunks, bats, raccoons only

¹⁹ Euth. required for skunks in whole state; Euth. required for raccoon, foxes, & coyotes in east

²⁰ Foxes only