

Rehabber Notification on Turtle Bunyavirus



October 10, 2019

Florida Fish and Wildlife Conservation Commission

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727-896-8626
727-823-0166 FAX

*Managing fish and wildlife
resources for their long-term well-
being and the benefit of people.*

**Fish and Wildlife
Research Institute**
Lovett E. Williams Jr.
Wildlife Research Laboratory
1105 SW Williston Road
Gainesville, Florida
32601-9044
Voice: (386) 758-0525
Fax: (352) 955-2183
Hearing/speech-impaired:
(800) 955-8771 (T)
(800) 955-8770 (V)
MyFWC.com/Research

An ongoing freshwater turtle die-off was first detected in the St. Johns River (SJR) in early 2018. Turtle mortalities have been linked to infection with a novel virus, currently referred to as **Turtle Bunyavirus (TBV)**. TBV has been detected in four freshwater turtle species: **Florida softshell turtle, Peninsula cooter, Florida red-bellied cooter, and red-eared slider**. *All turtle species may be susceptible to infection*. Laboratory confirmed Florida cases have been identified in turtles from Brevard, Collier, Orange, and Putnam Counties. However, undiagnosed turtle mortalities have been reported from throughout Florida, including the panhandle region. Therefore, wildlife rehabilitation centers statewide should be aware of the potential to receive TBV-infected turtles.

Any turtle that is weak or lethargic without an obvious cause (e.g., injury) should be considered possibly infected with TBV and handled according to the recommendations below. The virus infects the nervous system, thus affected turtles may display abnormal neurological signs, including slow response to stimulus, circling, or inability to completely submerge. Infected softshell turtles are often abnormally docile (slow to bite) and hold their necks in an extended and prone (held flat to ground) position. Other abnormal signs include sunken eyes; ulcers involving the eyes, oral cavity, and cloaca; splotchy pink or red discoloration of the plastron (in softshells); and on occasion, bubbling from nares and eyes.

The virus incubation period and means of transmission are not yet known. However, we do know that multiple organ systems, urine samples, and occasionally blood samples have tested positive by laboratory testing, thus affected turtles are considered potentially infectious to other turtles.

If your wildlife rehabilitation center receives freshwater turtles, please take the following steps:

1. Quarantine each newly admitted freshwater turtle until determined that the animal is not displaying any of the above-described clinical signs.
2. Practice careful sanitation techniques. Decontaminate water that has been in contact with quarantined turtles before disposing of the water. Use bleach or commercial virucidal solutions according to manufacturer recommendations. Guidelines for using bleach as a disinfectant can be found at: <https://sheltermedicine.vetmed.ufl.edu/files/2011/10/Guidelines-for-Using-Bleach-updated.pdf>
3. Release recovered freshwater turtles as close to their site of collection as possible.
4. For all cases except for obvious trauma, if a freshwater turtle is euthanized or dies please **freeze the double-bagged carcass** and notify the Florida Fish and Wildlife Conservation Commission's Wildlife Health Group.
Contact information:
Dr. Lisa Shender; lisa.shender@myfwc.com; (352) 334-4235
Veronica Guzman-Vargas; veronica.guzman-vargas@myfwc.com; (352) 339-8597
5. Label the carcass (use a sharpie pen to write on duct tape affixed to dry shell) with the minimum information below:
 - a. Rehabilitation center animal ID (if assigned)
 - b. DOD: Date of death/euthanasia
 - c. Center's contact information

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6. In addition, please provide the following information either on the animal's medical record or on a label contained within a ziplock baggie inside the bag with the turtle.
 - a. Rehabilitation center animal ID (if assigned)
 - b. Admission date
 - c. Date of death/euthanasia
 - d. If euthanized, please indicate method
 - e. Relevant treatment (antibiotics, etc.)
 - f. Collection location (most accurate data available, including lat/long if known)
 - g. Center's contact information

Thank you for your cooperation.

Sincerely,

A handwritten signature in black ink that reads "Lisa Shender". The signature is written in a cursive, flowing style.

Lisa Shender, MS, DVM, PhD

(352) 334-4235

Lisa.Shender@myfwc.com