



# NATIONAL WILDLIFE HEALTH CENTER

6006 Schroeder Road  
Madison, Wisconsin 53711-6223  
608-270-2400 (FAX 608-270-2415)

## DIAGNOSTIC SERVICES CASE REPORT

Case: 29023

### Final Report

2/21/2019

Epizoo:

Legal  Declassified  INV#:

#### Submitter:

Gary Jordan  
USFWS Ecological Services/Raleigh NC (EC, SE, ES)  
551 Pylon Drive F  
Raleigh, NC 27636-3726

Date Submitted: 2/5/2019

#### Specimen description/Identification/Location:

ACC	SPECIES	SPECIMEN TYPE	BAND NUMBER	SUBMITTER'S ID	COUNTY	STATE
001	Bat, Unidentified	SWAB, NOS		10	Craven	NC
002	Bat, Unidentified	SWAB, NOS		10	Craven	NC
003	Bat, Big Brown	SWAB, NOS		227	Craven	NC
004	Bat, Southeastern Myotis	SWAB, NOS		20	Jones	NC

#### Diagnosis:

1. Equivocal for *P. destructans* by PCR (Acc. 001)
2. Negative for *P. destructans* by PCR (Acc. 002-004)

#### Event History:

Individual bats were captured and swabbed at four sites in NC for *P. destructans* surveillance using sampling materials from an unknown source. Bats tested positive for Pd by real-time PCR at the BioInnovation Laboratory at Kennesaw State University.

BioInnovation Laboratory is sending the material from the 4 Pd+ bats for confirmatory testing at the request of USFWS; both the original swab sample collected in the field and the DNA extracted from the swab sample.

#### Comment:

Skin swabs were reextracted using NWHC protocols and real-time Pd PCR was performed in triplicate on each extract. Similarly, Pd PCR was performed in triplicate on each DNA extract provided from the KSU lab. Only 1 replicate from one of the KSU-provided DNA extracts (Acc. 001) resulted in an equivocal detection of Pd DNA. All other replicates tested negative for Pd DNA by real-time PCR.

An equivocal result means that the assay indicated that the target organism is potentially present, but that criteria were not met to call the sample positive. Equivocal results are inherent to many molecular tests and cannot be further resolved with the current samples possessed by NWHC. As the true status of the sample could be either positive or negative, follow-up sampling at the same location is strongly encouraged in the future. The USFWS National and Regional WNS Coordinators are also being notified in confidence of these results.

The NWHC and the USFWS are conducting surveillance and research on this emerging disease. Please contact Anne Ballmann (aballmann@usgs.gov, 608-270-2445) to discuss options for additional surveillance of this and neighboring hibernacula to further assess the presence of *Pd*.

Epizoo:

Legal  Declassified  INV#:

*Jeffrey M. Lorch*

---

Jeffrey M. Lorch Ph.D.

Diagnostic Microbiologist

Phone: 608-270-2420 Email: jlorch@usgs.gov

**The USGS-National Wildlife Health Center conducts wildlife disease investigations with state, federal and tribal partners, and we welcome collaborative dissemination of this information (e.g., publication, press release, technical report, etc.). Please contact the pathologist or wildlife disease epidemiologist assigned to this case to ensure that information is accurately interpreted and appropriately credited.**

**Copies To:**

DR. JEREMY COLEMAN

USFWS Hadley MA (RO5), 300 Westgate Center Drive, Hadley, MA 01035-9589

KATHERINE CALDWELL ETCHINGS

North Carolina Wildl Res Comm/Asheville, 10 Alexander Dr. Apt. 724, Asheville, NC 28801

PETE PATTAVINA

USFWS Ecological Services/Athens GA, 105 Westpark Drive, Suite D, Athens, GA 30606

DR. CHRISTOPHER CORNELISON

Kennesaw State University, 585 Cobb Ave, MD 0111, Kennesaw, GA 30144

This is a Report for your submission to the National Wildlife Health Center.

For consultation regarding diagnostic findings or laboratory testing and results, please contact the pathologist. Contact information can be found underneath the signature line on this report.

For consultation on the significance of this disease to wildlife populations in your area, assistance with disease control and response, or to report field updates (numbers and species affected, geographical distribution, end date, etc.), please contact an NWHC epidemiologist at NWHC-epi@usgs.gov or 608-270-2480.