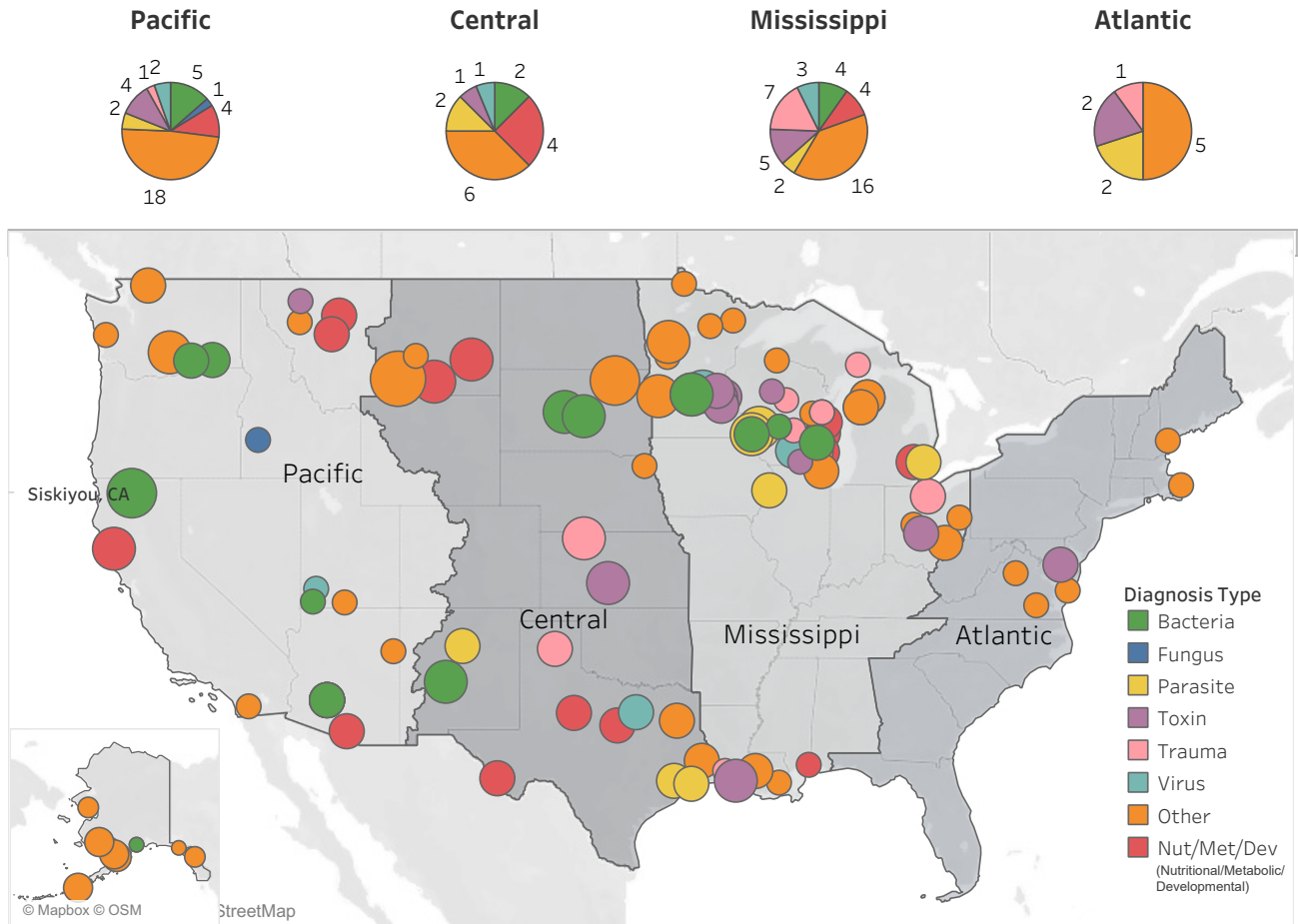


National Wildlife Health Center Newsletter

September 2019

United States Wildlife Health Events at a Glance

Summary of events reported to [WHISPers](#) in 2019; 98 events and over 34,000 affected animals reported as of 8/21/19.



Top 10 Diagnoses 2019

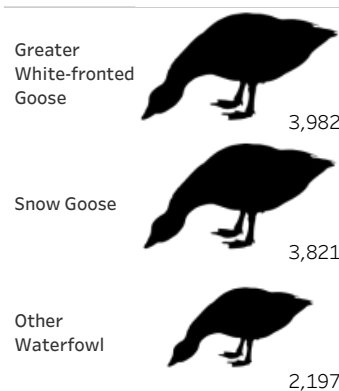
by number of events

Diagnosis	Count
Emaciation (NOS)	9
Toxicosis (lead)	5
Avian Cholera	4
Blunt Trauma (NOS)	3
Blunt Trauma (power line collision)	3
Trichomoniasis	3
Botulism Type C	2
Emaciation (starvation)	2
Pigeon Paramyxovirus-1	2
Salmonellosis	2

Excludes pending and undetermined diagnoses
NOS= Not otherwise specified

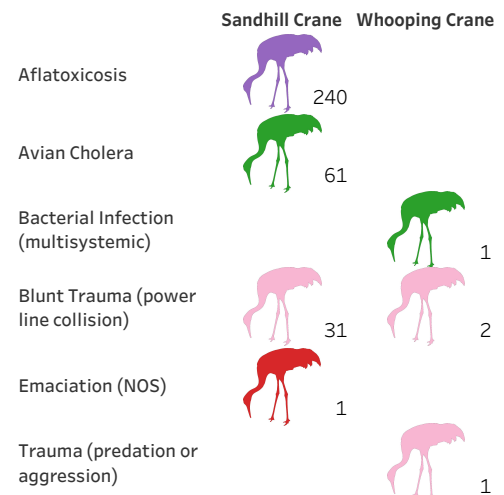
Highlighted mortality event: Avian Cholera

Siskiyou, CA
January 23 - April 7, 2019



Highlighted Species: Crane Mortalities

with number of reported dead



Introducing WHISPers 2.0

On July 1, 2019 the USGS National Wildlife Health Center (NWHC) launched a revamped and improved version of the Wildlife Health Information Sharing Partnership - event reporting system, [WHISPers 2.0](#). Built to address needs identified by partners for mapping and sharing basic wildlife mortality information online, WHISPers provides real-time understanding of where and when wildlife disease events occur.

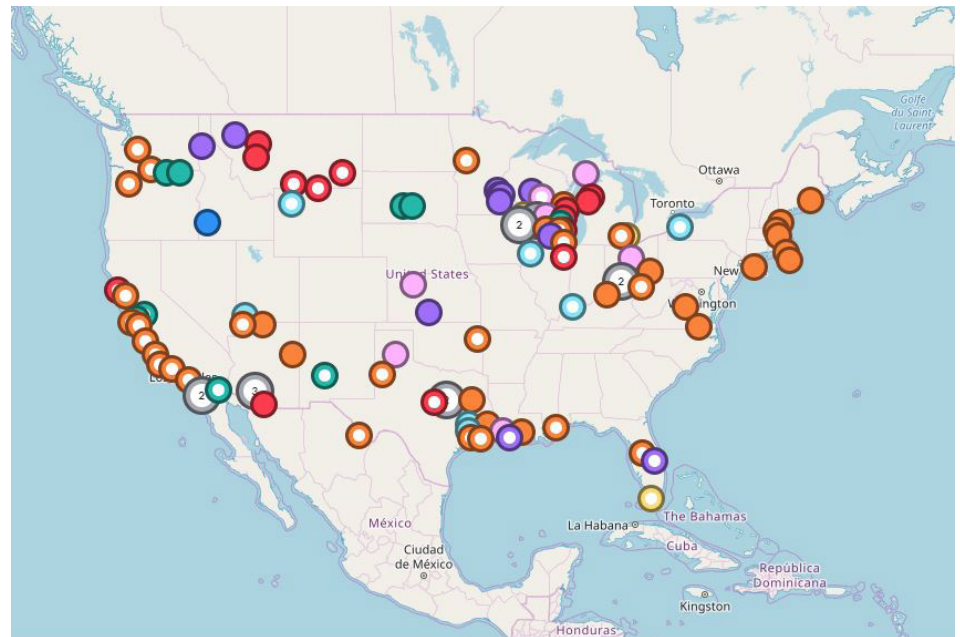
As a national laboratory, NWHC receives reports of wildlife morbidity/mortality events from state, federal, tribal, and other partners involved in managing or studying wildlife and ecosystems from across the country. Since 1981, NWHC has provided basic summary information on these events, such as county location, species, number affected, and primary cause of the event to help partners better understand where and when disease outbreaks occurred. WHISPers 1.0 was released in 2015 to provide this historic information publicly online for the

first time. WHISPers 2.0 has been completely rebuilt on a robust and secure platform to support new functionality including allowing authorized partner users to create and edit wildlife morbidity/mortality events investigated by their agency. WHISPers 2.0 will also be used to

streamline requests of NWHC's diagnostic services and assistance with wildlife disease issues.

Visit [WHISPers 2.0](#).

Access WHISPers [user guides and documentation](#).



WHISPers 2.0 homepage showing the locations of wildlife mortality events from January 1 to July 1, 2019.

Developing Case Definitions with the Canadian Wildlife Health Cooperative

The National Wildlife Health Center (NWHC) is collaborating with the [Canadian Wildlife Health Cooperative](#) (CWHC) on the development of case definitions for many common and priority wildlife diseases. A case definition is an epidemiological tool that provides a set of criteria for diagnosing a disease, thereby providing consistency in diagnoses over time and between institutions, and a better understanding of disease outbreaks. Through the use of case definitions data could be more easily shared and combined allowing for better clarity

on the spatial and temporal extent of outbreaks and improved ability to develop risk analyses, design surveillance strategies, and inform management options.

The CWHC and the NWHC share similar goals and challenges in providing wildlife diagnostic services and both agencies have a national perspective on wildlife health. Interestingly, both groups independently initiated case definitions efforts within the last several years. By working together, we hope to maximize the quantity

and quality of case definitions for diseases of North American wildlife. As World Organisation for Animal Health (OIE) Collaborating Centres for Wildlife Health and Biodiversity, we also have an opportunity to share our expertise with the international community as international case definitions for wildlife diseases are developed. All case definitions will be made publicly available and will be reviewed regularly and updated as our understanding of wildlife disease develops.

Updating the *Bsal* Risk Assessment

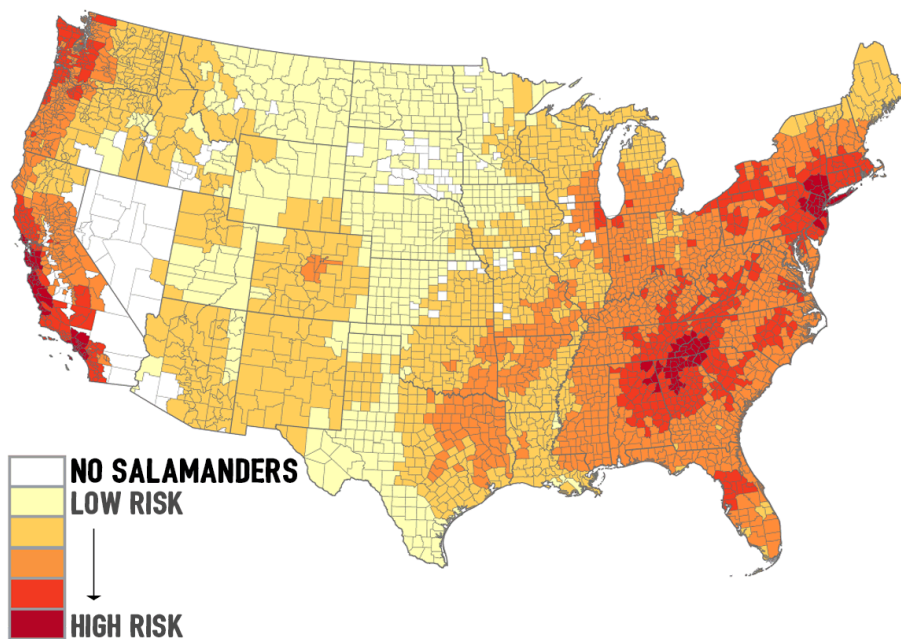
It has been 6 years since the novel amphibian pathogen *Batrachochytrium salamandrivorans* (*Bsal*) was discovered as a cause of devastating declines in European salamanders. As North America has the greatest diversity of salamander species (Caudata) in the world, the spread of *Bsal* to the United States could pose a severe threat to global biodiversity. In response, the NWHC and [USGS Amphibian Research and Monitoring Initiative](#) (ARMI) developed a [spatial risk model](#) that incorporated information on *Bsal* ecology, salamander species diversity, and the pet trade ([Richgels et al. 2016](#)). Since the completion of that



Newt spotted during sampling fieldwork in Wisconsin.

model, the USFWS regulations have altered salamander imports, new susceptible hosts have been identified, and NWHC and ARMI have maintained an extensive surveillance effort of over 10,000 sampled amphibians with no detections. The NWHC is currently leading a study to update the *Bsal* invasion risk model by collating this new data and

re-evaluating the risk components of introduction, exposure, and consequence. We will also leverage our extensive surveillance database to generate alternative scenarios of potential release and detection and create an interactive mapping application to help generate scenarios for risk-based surveillance and response planning.



Heat map of the United States showing the total relative risk of *Bsal* to native US salamanders based on the introduction and consequences assessment (Richgels et. al. 2016).

Pathology Case of the Month Series

Wildlife pathologists at the NWHC routinely investigate the causes of wildlife mortality events in the United States as part of our diagnostic services. In our new series, Pathology Case of the Month, our pathologists outline a notable wildlife mortality case. The cases outline findings from necropsy, histopathology, and laboratory test results that are interpreted by the pathologists to

infer cause of death. Additional information on disease is shared along with applicable management actions and information on public health concerns.

View the [Pathology Case of the Month series](#).

August: [Ross's Goose](#)

September: [Mourning Dove](#)



Snow and Ross's geese pass over the Sacramento National Wildlife Refuge. Credit: Steve Emmons/USFWS.

More Information from the NWHC

Visit our website at www.usgs.gov/nwhc and follow us on Twitter [@USGSWILDLIFE](https://twitter.com/USGSWILDLIFE)

To sign up to receive Newsletters and Wildlife Health Bulletins from the NWHC, please email nwhcoutreachdb@usgs.gov.