

The ZSL Wild Science Podcast: Show Notes

Episode: ZSL #036 What lies beneath: investigating the amazing world of wildlife pathology

Pathology is the science of diagnosing diseases by observing physical changes in animal cells and tissues, either in living, or more commonly dead animals. In this episode, our host Ellie Darbey will explore the unseen...or rather, unheard world of wildlife pathology with the help of ZSL's experienced pathologists, veterinarians, and scientists. Through post mortems on black widow spiders, to giant stranded humpback whales, these four pathology professionals will show the value of this diagnostic work to the conservation and welfare of animals in zoos and in the wild. What are the practicalities of examining large animals like elephants and rhinos? How can pathology be used to solve wildlife crimes? And what do pathology and The Supreme Court have in common?

Guests

- > Dr Simon Spiro, Wildlife Health Services, Zoological Society of London
- <u>Dr Becki Lawson</u>, Institute of Zoology, Zoological Society of London
- Rob Deaville, Institute of Zoology, Zoological Society of London
- <u>Dr Tammy Shadbolt</u>, Institute of Zoology, Zoological Society of London

Overview

- **01:22** Ellie Darbey introduces the first guest, Dr Simon Spiro, to discuss what it's like to be a veterinarian pathologist, and how pathology can be used for animal welfare and conservation
- **14:06** Ellie is joined by Dr Becki Lawson to explore the Garden Wildlife Health Project and the detective work used to discover a snake fungal pathogen in Europe.
- 27:15 Rob Deaville joins to explain what happened to "Hessy" the humpback whale, and how the Cetacean Strandings programme works.
- **40:10** Ellie welcomes the final guest Dr Tammy Shadbolt to discuss the Disease Risk Analysis and Health Surveillance Project and how pathology can help solve wildlife crimes.
- **49:44** The speakers give their advice for pursuing a career involving wildlife pathology from their varied backgrounds and perspectives.

Resources

- Previous ZSL Event "Revealing the unseen: the amazing world of wildlife pathology": <u>https://www.zsl.org/science/whats-on/revealing-the-unseen-the-amazing-world-of-wildlife-pathology</u>
- ➤ Blog: Grass in the Snake Zoo Pathology in Practice: https://www.zsl.org/blogs/science/grass-in-the-snake-zoo-pathology-in-practice



- Royal College of Pathologists: Careers in Pathology: https://www.rcpath.org/discover-pathology/careers-in-pathology.html
- Royal College of Pathologists: Become a Veterinary Pathologist: https://www.rcpath.org/discover-pathology/careers-in-pathology/become-a-veterinary-pathologist.html
- > Garden Wildlife Health Project: www.gardenwildlifehealth.org
- UK Cetacean Strandings Investigation Programme (CSIP): https://www.zsl.org/science/research/uk-cetacean-strandings-investigation-programme-csip
- "Hessy" the humpback whale in the media: https://www.theguardian.com/environment/2019/oct/09/humpback-whale-found-dead-thames-hit-by-ship
- Collaborative UK Marine Mammals Strandings Project: summary of contaminant data for the period 1993-2001: https://www.cefas.co.uk/publications/techrep/tech131.pdf
- ➤ Disease Risk Analysis and Health Surveillance (DRAHS) Project: https://www.zsl.org/science/wildlife-health/disease-risk-analysis-and-health-surveillance
- ➤ Hazel dormouse 1000th reintroduction: https://www.zsl.org/blogs/science/dormouse-reintroductions--a-landmark-day
- > Study and Research Opportunities at ZSL: https://www.zsl.org/science/postgraduate-study