## Accepted Manuscript

Title: An update on *Toxoplasma gondii* infections in northern sea otters (*Enhydra lutris kenyoni*) from Washington State, USA

Authors: Shiv K. Verma, Susan Knowles, Camila K.

Cerqueira-Cézar, Oliver C. Kwok, Tiantian Jiang, Chunlei Su,

Jitender P. Dubey

PII: S0304-4017(18)30193-6

DOI: https://doi.org/10.1016/j.vetpar.2018.05.011

Reference: VETPAR 8681

To appear in: Veterinary Parasitology

Received date: 12-3-2018 Revised date: 2-5-2018 Accepted date: 21-5-2018

Please cite this article as: Verma SK, Knowles S, Cerqueira-Cézar CK, Kwok OC, Jiang T, Su C, Dubey JP, An update on *Toxoplasma gondii* infections in northern sea otters (*Enhydra lutris kenyoni*) from Washington State, USA, *Veterinary Parasitology* (2018), https://doi.org/10.1016/j.vetpar.2018.05.011

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



## ACCEPTED MANUSCRIPT

An update on *Toxoplasma gondii* infections in northern sea otters (*Enhydra lutris kenyoni*) from Washington State, USA

Shiv K. Verma<sup>1</sup>, Susan Knowles<sup>2</sup>, Camila K. Cerqueira-Cézar<sup>1</sup>, Oliver C. Kwok<sup>1</sup>, Tiantian Jiang<sup>3</sup>, Chunlei Su<sup>3</sup>, Jitender P. Dubey<sup>1,\*</sup>

<sup>1</sup>US Department of Agriculture, Agricultural Research Service, Beltsville Agricultural Research Center, Animal Parasitic Diseases Laboratory, Building 1001, Beltsville, MD, 20705-2350, USA

<sup>2</sup>US Geological Survey, National Wildlife Health Center, 6006 Schroeder Road, Madison, WI 53711, USA

<sup>3</sup>Department of Microbiology, University of Tennessee, Knoxville, TN 37996-0845, USA

\*Corresponding authors: J. P. Dubey, USDA-ARS, Beltsville Agricultural Research Center, Animal Parasitic Diseases Laboratory, Building 1001, Beltsville, MD 20705-2350, USA. Tel number: +1-301-526-9149

FAX number: +1-301-504-9222

E-mail: Jitender.Dubey@ars.usda.gov

#### **Highlights**

- Toxoplasmosis in marine mammals is epidemiologically and clinically important disease.
- Toxoplasma gondii antibodies were detected in 65 of 70 (92.9%) northern sea otters (Enhydra lutris kenyoni) from Washington State, USA.
- Viable *T. gondii* was isolated from 22 of 44 (50%) naturally infected northern sea otters; *T. gondii* strains were lethal to KO mice but not SW mice.
- Genetic makeup of isolates from northern sea otters was similar to those from the southern sea otters and terrestrial wildlife from North America.

### Download English Version:

# https://daneshyari.com/en/article/8505932

Download Persian Version:

https://daneshyari.com/article/8505932

<u>Daneshyari.com</u>