Accepted Manuscript

Tiger and leopard diets in western Thailand: Evidence for overlap and potential consequences

Achara Simcharoen, Saksit Simcharoen, Somphot Duangchantrasiri, Joseph Bump, James L.D. Smith

PII: S2352-2496(18)30015-6

DOI: doi:10.1016/j.fooweb.2018.e00085

Article Number: e00085

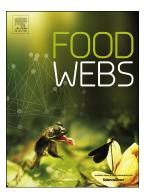
Reference: FOOWEB 85

To appear in:

Received date: 25 April 2018 Accepted date: 29 April 2018

Please cite this article as: Achara Simcharoen, Saksit Simcharoen, Somphot Duangchantrasiri, Joseph Bump, James L.D. Smith, Tiger and leopard diets in western Thailand: Evidence for overlap and potential consequences. The address for the corresponding author was captured as affiliation for all authors. Please check if appropriate. Fooweb(2018), doi:10.1016/j.fooweb.2018.e00085

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

Tiger and Leopard Diets in Western Thailand: Evidence for Overlap and Potential Consequences

Achara Simcharoen1 ¶, Saksit Simcharoen1 ¶,

Somphot Duangchantrasiri1¶, Joseph Bump2*¶ and James L. D. Smith2*¶

1Protected Area Administration, Office 12, Department of National Parks, Wildlife, and Plant Conservation, Nakhon Sawan, Thailand

2 Department of Fisheries, Wildlife, and Conservation Biology, University of Minnesota, 2003 Upper Buford Cr., St. Paul, MN 55108, USA.

* Corresponding author

E-mail: smith017@umn.edu

AS,SS,SD collected field data; AS,SS,JS analyzed data; AS,SS,JB,JS contributed to writing the manuscript.

Abstract

Interference competition by tigers, *Panthera tigris*, is widely reported to reduce leopard, *Panthera pardus*, density or cause its shift to more a marginal habitat. In Southeast Asia, lack of a medium sized prey, spotted deer (*Axis axis*), and increased consumption of sambar (*Rusa unicolor*) by leopards amplifies dietary overlap between these two large felids. In our study area in western Thailand, leopard density was 2.4 times that of tigers. Using scat analysis we estimated prey biomass in the diet of each species to examine resource competition between these species. Tigers had a 0.89 spatial overlap with leopards and leopards a 0.92 overlap with tigers. Larger prey in this system (>100 kg) composed 89.8 (Ackerman's coefficient, ACF, and 79.3% Chakrabati's coefficient, CCF of the biomass in tiger diet and 47.0% (ACF) and 45.3% (CCF) of the biomass in leopard diet. Dietary overlap of prey >100 kg versus smaller prey (≤ 37 kg) between these felids was 74.4% (ACF) and 81.2% (CCF). Dense cover at our site may reduce interference

Download English Version:

https://daneshyari.com/en/article/8875289

Download Persian Version:

https://daneshyari.com/article/8875289

Daneshyari.com