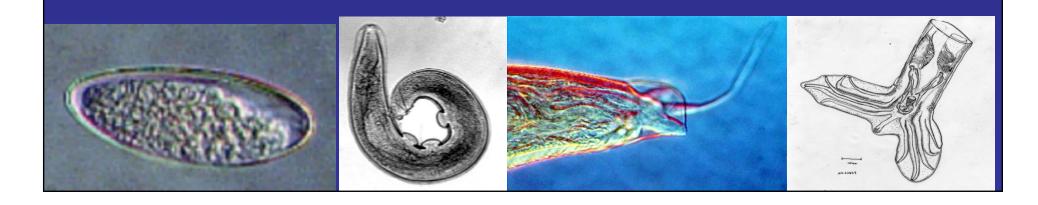
# The Harold W. Manter Laboratory of Parasitology

What is it that we do in the HWML?



## MISSION - Programs

- Train students young and old k gray
- Produce new research results using both newly collected and legacy specimens
- Train new scientists and produce Ph.D.'s
- Conserve and make available literature on parasitology and systematics of parasites.
- Facilitate use of specimens in the database and in the collections of the HWML



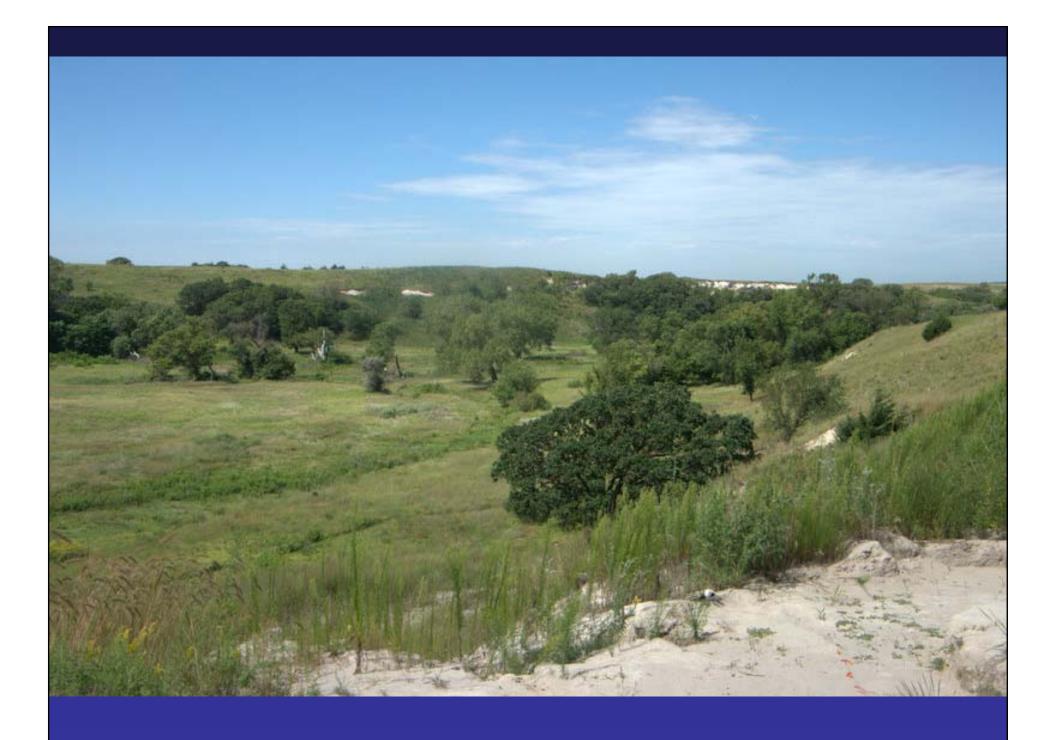
# Research Outreach And Education Outreach

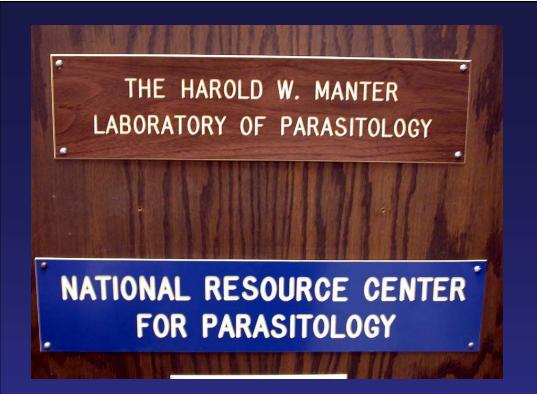
 Photos following are from Gobi Worms project – 2 classes of underprivileged students from Lincoln participated in a one week course led by Gardner and Kathy French from the Education Division, UNSM.



# Ashfall Fossil Beds, Northern NE, near Royal







From the 1940's – the 1970's Harold W. Manter at UNL, specializing in Digenea of marine fishes. Manter's collection formed the nucleus of the current HWML research collections in 1971 when the Division of Parasitology was established.

The Manter Lab supports a museum research collection that enables research on parasite systematics and the training of students. We care for specimens and archive them for scientists world-wide.



#### **UNL Research Associates:**

Dennis Feely, Ph.D.
John Janovy Jr., Ph.D.
Thomas O. Powers, Ph.D.
Karl J. Reinhard, Ph.D.
Daniel R. Brooks, Ph.D.

[retired but not retired]
Donald Gettinger, Ph.D.

#### Research Associates Emeriti:

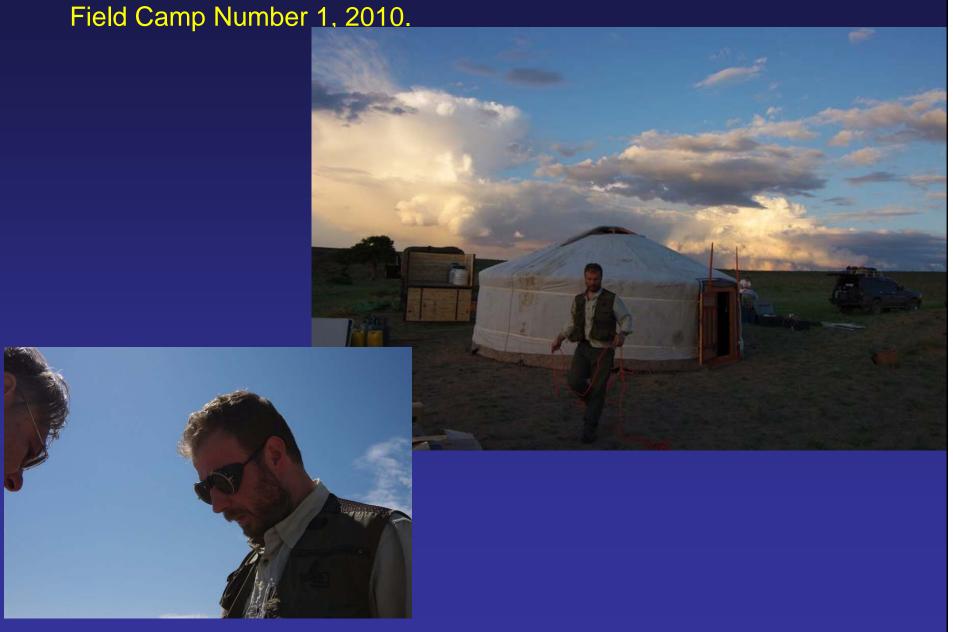
Franklin Sogandares-Bernal, Ph.D.
Southern Methodist University
Brent B. Nickol, Ph.D.
School of Biological Sciences, UNL

### Off Campus Research Associates:

Donald W. Duszynski, Ph.D.
University of New Mexico
Eric P. Hoberg, Ph.D.
U.S. National Parasite Collection
Delane C. Kritsky, Ph.D.
Idaho State University
Guenther Kruse, Ph.D.
Pfizer Inc.
Steven A. Nadler, Ph.D.
University of California, Davis

Robin M. Overstreet, Ph.D.
Gulf Coast Research Laboratory
Robert L. Rausch, DVM, Ph.D.
University of Washington
Ivan Kanev Stoyanov, Dr.Sc., D.V.M.
University of Nebraska Medical
Center

Gabor Racz, collection manager in the Manter Laboratory –in the field – south of Ulaanbaatar, Mongolia. Near the border of China.



In Part - The Manter Laboratory enables the science of parasitology, systematics, and taxonomy conducting and supporting research on parasites, primarily of vertebrates, world-wide.

The big idea is to try to document and describe the biodiversity of the planet before it is gone.\*

Relatively recent field expeditions.

Bolivia

Mongolia

Mexico

South Africa

**New Mexico** 

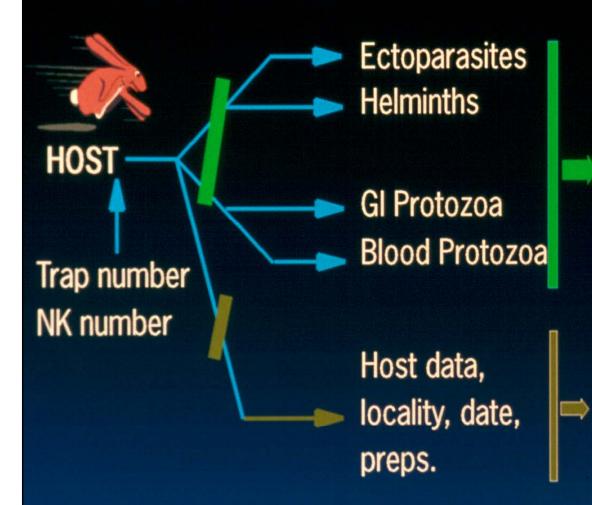
Alaska

Colorado

Zambia? – we have a proposal being prepared for a survey there.

It is going FAST!

## Data Stream



Specimens i.d. & counted Cataloged in Museums. Relational Database.

Autorelational distributed GIS
Database.
Specimens i.d. & cataloged in Museums.
Relational Database.



Notebook entries.
Photographs.
Voice and video tape.





The HWML parasite collections include holotypes, paratypes, other kinds of types, and vouchers from field and laboratory studies. We also loan specimens for teaching Parasitology at colleges throughout the USA.



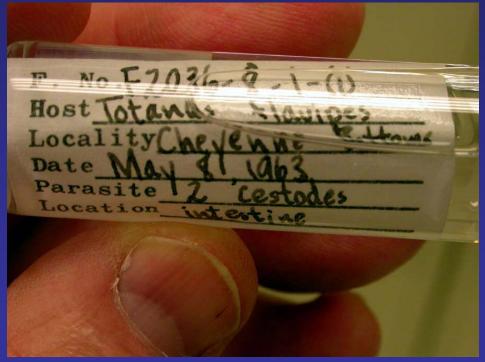
A holotype is **the** specimen that a scientist selects to represent a new species; paratypes are other examples of the new species that were studied in order to write the description.

The HWML lends specimens, including types, to legitimate scientists all over the world for a variety of studies. Systematics and taxonomy most common.



Visitors to the Manter Laboratory from Dr. Janovy's Invertebrate Zoology Class in 2007.





Retired scientists have donated massive numbers of specimens to the University of Nebraska State Museum. For example, J. T. Self, from the University of Oklahoma, donated much of his collection, including all the specimens collected from migratory birds in the 1960s as part of a very large research project on the intercontinental movement of parasites and viruses.

Totanus flavipes (now Tringa flavipes), is the lesser yellowlegs. This specimen was collected in central Kansas and probably brought its two tapeworms from South America.

25354	Proechimys sp.	
25360	Marmosa sp.	1
25361	Oryzomys capito	
25362	Oryzomys capito	-
25363	Oryzomys capito	
1253/1	Oecomys hicolor	
253/5	Oryzomys megacephalus	
CUTUU	UIVZOMVS capito	
25555	Akodon aerosus	
25558	Oligoryzomys microtis	
20000	Oryzomys nitidus	
25560	Oryzomys nitidus	
	Akodon sp.	







- There is a global traffic in specimens because of this need to understand what we are actually working on.
- The Harold W. Manter Laboratory of Parasitology at UNL contains one of the major parasite research collections in the world – estimated to be the 4<sup>th</sup> largest and growing rapidly
- This collection is supported by a large and rich library.

The library books are 99% cataloged in a free online database: Sue Gardner, a cataloger from the Libraries on the UNL campus was assigned to the HWML for one year to Catalog our collection.

Access the HWML library at:

http://librarything.com/catalog/manterlab

## How do we fund this operation?

- -Grant support federal NSF
- -State support Museum operating budget School of Biological Sciences
- -Private donations -

#### **ENDOWMENTS IN THE HWML:**

The WILLIAM C. CAMPBELL ENDOWMENT FUND was established by Merck & Co. Inc., to support a Visiting Scholar Program at the Manter Laboratory.

The J. TEAGUE SELF ENDOWMENT FUND was established by Dr. Self for Lectureships and/or Visiting Curatorships..

The MARY HANSON PRITCHARD ENDOWMENT FUND was established to enhance our library.

The Harold W. Manter Endowment Fund, established to fund future curatorships.

The Harold W. Manter Development Fund, established to fund future curatorships

### How do we fund this operation?

- -Grant support federal NSF
- -State support Museum operating budget School of Biological Sciences
- -Private donations go to <a href="http://hwml.unl.edu">http://hwml.unl.edu</a>
- \*Appear on shows like Penn and Teller Bullshit, etc. Each year many small donations come in from viewers who watched "Detoxing" and my spiel for monetary assistance at the end of the segment.
- \*Assist people when they have problems -We receive hundreds of e-mails and phone calls in the HWML annually from people who have found us and need advice.
- \*Apply for grants like mad. This enables us to do work that only a few people have ever been able to visit to do field collecting.

