



**Program Book**  
JMIH 2013

Hosted By  
University of New Mexico  
Museum of Southwestern Biology

This program book is current as of 5 June 2013. Any cancellations or changes received after this date will be posted outside of the session rooms and on the message boards located near the registration desk in the Lower Level West Atrium of the Albuquerque Convention Center.



ALBUQUERQUE, NEW MEXICO  
10-15 JULY 2013



**2013 Joint Meeting of Ichthyologists and Herpetologists  
10-15 July 2013**

***Organizing Societies***

American Elasmobranch Society  
*29th annual meeting*



American Society of Ichthyologists and Herpetologists  
*93rd annual meeting*



Herpetologists' League  
*71st annual meeting*



Society for the Study of Amphibians and Reptiles  
(in conjunction with the International Society for the History and Bibliography of  
Herpetology)

*56th annual meeting*



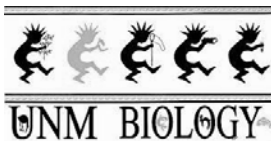
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A list of 2013 Joint Meeting participants will be available on the web site  
beginning 2 August 2013

[www.dce.ksu.edu/conf/jointmeeting](http://www.dce.ksu.edu/conf/jointmeeting)



## **Local Hosts**

**Tom Turner**, Museum of Southwestern Biology, University of New Mexico, Chair

**Lex Snyder**, Museum of Southwestern Biology, University of New Mexico

**Steve Ross**, Museum of Southwestern Biology, University of New Mexico

**Tom Giermakowski**, Museum of Southwestern Biology, University of New Mexico

**Steven Platania**, Museum of Southwestern Biology, University of New Mexico

**Norman Mercado-Silva**, Department of Biology, University of New Mexico &  
Universitario de la Costa Sur, Universidad de Guadalajara in Mexico

**Mason Ryan**, Museum of Southwestern Biology, University of New Mexico

## **Volunteers**

**Meghan Balk**, University of New Mexico

**Olivia Chavez**, New Mexico Institute of Mining and Technology

**Tracy Diver**, University of New Mexico

**Elizabeth Gallagher**, New Mexico Institute of Mining and Technology

**Levi Gray**, University of New Mexico

**Victoria Hansen**, University of New Mexico

**Angela Hung**, University of New Mexico

**Ian Latella**, University of New Mexico

**Lorraine McInnes**, University of New Mexico

**Tyler Pilger**, University of New Mexico

**Jolene Rearick**, University of New Mexico

**Mason Ryan**, University of New Mexico

**Brad Truett**, University of New Mexico

**Rhiannon West**, University of New Mexico

# General Meeting Information

## Meeting Room Information

During presentations, please turn off all cell phones or set them to vibrate.

**President's Travelogue** - Brazos/Galisteo/Aztec (Ground Level East)

**Plenary Session** - Brazos/Galisteo/Aztec (Ground Level East)

### **Beverage Breaks**

Thursday a.m. & Monday a.m. and p.m. - Ground Level West Atrium

Thursday p.m. - Sunday p.m. - NW Exhibit Hall (Ground Level West)

**Exhibit Area** - NW Exhibit Hall (Ground Level West)

**Poster Presentations** - NW Exhibit Hall (Ground Level West)

### **Oral Presentations**

Ruidoso/Pecos, San Miguel, Mesilla (Upper Level East)

Doña Ana/Cimarron, Brazos, Galisteo/Aztec (Ground Level East)

### **Speaker Prep Rooms**

Estancia, Enchantment I, Enchantment II (Lower Level West)

**AES Office** - Tijeras (Upper Level East)

**ASIH Graduate Student Book Raffle**- Ground Level West Atrium

**SSAR Silent Auction** - Ground Level West Atrium

**SSAR/HL Live Auction Viewing Room** - La Cienega (Upper Level East)

**HL/SSAR Live Auction** - Brazos/Galisteo/Aztec (Ground Level East)

**SSAR/HL Student Social** - Santa Ana/Sandia/Picuris (Lower Level West)

**JMIH Closing Banquet** - Ballroom C (Upper Level West)

## Internet Access

A small Internet café is available on the Ground Level West Atrium of the Albuquerque Convention Center near registration for JMIH participants. The café will be available from 7 a.m. - 5 p.m., Thursday, 11 July - Monday, 15 July.

If you have your own laptop, there is free internet throughout the entire convention center and in all guest sleeping rooms of the Hyatt Regency, DoubleTree, and Hotel Blue for all JMIH participants.

## Registration Desk

The JMIH Registration Desk, located on the Ground Level West Atrium of the Albuquerque Convention Center, is open from 7 a.m. - 5 p.m. Wednesday, 10 July - Monday, 15 July. The Registration Desk is staffed to answer any questions you might have regarding the meeting.



## **Messages and Job Announcements**

Message boards are located near registration on the Ground Level Atrium of the Albuquerque Convention Center. Participants may post messages for friends and colleagues. The registration staff will also post telephone and other messages on these boards. Urgent messages should be directed to the Albuquerque Convention Center at (505) 338-2510 during meeting hours. These will be relayed to meeting coordinators and posted for participants as soon as possible.

Job announcements or information about employment opportunities may be posted on the message boards as well.

## **Business Center**

The Albuquerque Convention Center has a fully staffed Business Center in the Lower Level West complex. It is staffed from 8:00 a.m. – 5:00 p.m, Monday – Friday. If any assistance is required outside of normal business hours, prior arrangement must be made.

Facilities include:

PC/Internet usage

B/W and Color Printing

Shipping services (FedEx, UPS,)

## **Food and Beverage**

Morning and afternoon beverage breaks will be served in the following locations:

Thursday a.m. and Monday a.m. and p.m. - Ground Level Atrium West

Thursday p.m. - Sunday p.m. - with the exhibitors in the NW Exhibit Hall.

A cash bar will be available during poster sessions, 4:00 - 6:00 p.m., Friday - Sunday, 12-14 July.

Lunch is on your own each day. A variety of restaurants are available within walking distance of the convention center.

## **Event Tickets**

A variety of tickets may be included in your namebadge. The number of tickets you have is determined by your personal registration choices.

### ***Reception tickets***

All registered participants, the first exhibitor representative, and any tickets purchased for guests will receive two (2) reception drink tickets good for beer, wine, a special margarita, or soda.

Additional food and beverage tickets (by registration only) may include:

JMIH Closing Banquet for Monday, 15 July

# Presenter Information

## Oral Presenters

Oral Presenters should submit their presentations to an Alliance AV representative by 3:00 p.m. the day preceding their presentation. Alliance AV will be set up in Santo Domingo in the Lower Level West complex of the Albuquerque Convention Center to receive presentations at the following times:

Wednesday, 10 July - 1:00 p.m. - 3:00 p.m.

Thursday, 11 July - Sunday, 14 July - 7:00 a.m. - 3:00 p.m.

The technical coordinators available will immediately load and review presentations as they are submitted. A presenter's memory stick or CD will be returned when the presentation has been successfully loaded.

An Alliance AV representative will be present in each meeting room to monitor equipment and presentations.

Three *Speaker Prep Rooms* are available in the convention center.

Estancia, Enchantment I, and Enchantment II, located in the Lower Level West complex of the Albuquerque Convention Center, will have computers and projectors available for speakers to practice their presentations. A sign-up sheet is posted outside each room.

Speaker prep rooms are available from 7:00 a.m. - 7:00 p.m. beginning Wednesday, 10 July.

Session moderators have been designated to facilitate each session. The names of moderators are noted in the session schedule. Moderators should have received their packet of instructions when checking in at the Registration Desk.

## Poster Presenters

Poster session dates and times are as follows:

Friday, 12 July 4:00 - 6:00 p.m.

Saturday, 13 July 4:00 - 6:00 p.m.

Sunday, 14 July 4:00 - 6:00 p.m.

At least one author must be present during the entire poster session time period. Please remove your poster immediately following the poster session. Posters not claimed by 5:00 p.m. on Monday, 15 July will be discarded.

### *Poster Board Assignments*

A listing of poster sessions is current as of the printing of this program book (June 5). All poster boards are numbered. The title and author will be posted on each board as well. Because some posters are part of competitions, it is important that each presenter place their poster in the correct location. Presenters can place their poster on their assigned board anytime between 9:00 a.m. and 4:00 p.m. on the day they are presenting.

# Special Announcements from the Societies

## **ASIH General Endowment Fund Information**

ASIH thanks all the members who have made contributions to the General Endowment Fund. Currently your gifts are used to support ASIH symposia each year at the Joint Meeting of Ichthyologists and Herpetologists.

ASIH also thanks meeting attendees who participate in the student-run book raffle, which directly supports student travel to the JMIH. In recognition that today's student members are the future of ASIH and that attendance at the JMIH encourages society involvement, ASIH matches dollar for dollar funds raised at the raffle. Please help ASIH promote our students. Be generous and make this year's raffle a great success.

## **AES Store**

### **Tijeras (Upper Level East)**

The AES Store is open! A variety of elasmobranch-related goods, including pens, water bottles, and shirts are available. Proceeds go to support AES student funding.

## **SSAR President's Travelogue**

**Wednesday, 10 July 2013 - Brazos/Galisteo/Aztec (Ground Level East) - 7:00 p.m.**

SSAR invites everyone to this year's President's Travelogue. Joe Mendelson, Director of Herpetological Research at Zoo Atlanta, will speak on "The Ballad of Gringo Perdido: The Art of Getting Lost."

## **HL/SSAR Live Auction Viewing Room**

**Thursday, 11 July - Sunday, 14 July - La Cienega (Upper Level East)**

All items for the HL/SSAR Live Auction will be available for viewing. Items can be viewed on Thursday, 11 July through Sunday, 14 July from 8:00 a.m. - 5:00 p.m.

## **HL/SSAR Live Auction**

**Sunday, 14 July - Brazos/Galisteo/Aztec (Ground Level East) - 9:00 p.m. - midnight**

All JMIH participants are welcome to attend and bid on donated items. A cash bar will be available.

## **ASIH Graduate Student Speed Networking Event**

**Friday, 12 July - Santa Ana/Sandia/Picuris - 6:00-8:00 p.m.**

ASIH invites all ASIH graduate students to a new speed networking event. You will get a chance to interact with a variety of professionals from state and federal agencies, museums, small and large universities, and more. Stations will be set up for each category and you will get 5 minutes to interact with each group before moving to the next station. A social interactive time will follow. Pizzas and drink tickets will be provided.

## **Copeia 100th Anniversary Speaker**

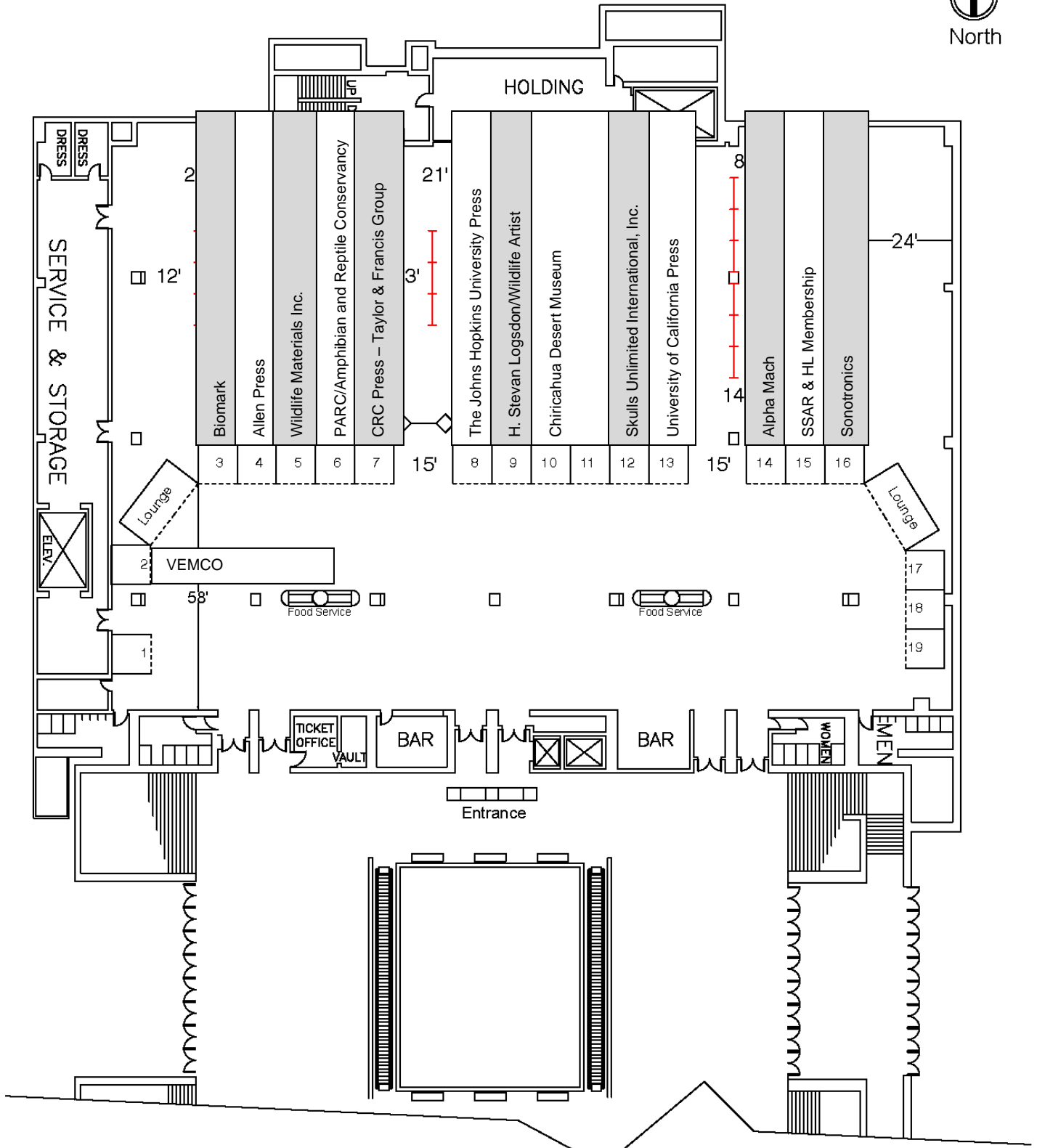
**Friday, 12 July - Doña Ana/Cimarron - 8:00 p.m.**

Join ASIH in celebrating the 100th Anniversary of Copeia. John Nichols, grandson of the founder of Copeia, John Treadwell Nichols, will present a talk titled, "Our hearts belonged to nature. A memoir of a father, a son, and a grandson in the natural world."

# Joint Meeting of Ichthyologists & Herpetologists

July 10 -15, 2013

Albuquerque Convention Center  
NW Exhibit Hall



# Social Events

## No-Host Social - Hotel restaurant bars

### Wednesday, 10 July - 7 p.m.

Join your colleagues on Wednesday evening in either the Hyatt Regency or DoubleTree lobby bars.

## Group Photos

### JMIH Group Photo - Plaza across the street from the Albuquerque Convention Center

#### Thursday, 11 July - 12:00 p.m.

The traditional JMIH group photo will be taken on Thursday, 11 July at 12:00 p.m. immediately following the plenary session outside of the Albuquerque Convention Center. Photos will be posted to the JMIH website for free download by all participants.

### AES Group Photo - Hotel Andaluz

#### Sunday, 14 July - at AES Banquet

The traditional AES group photo will be taken on Sunday, 14 July during the AES Banquet. Photos will be posted to the JMIH website for free download by all participants.

## SSAR/HL Student Social - Santa Ana/Sandia/Picuris

### Thursday, 11 July - 4:30 - 5:30 p.m.

SSAR and HL Board members and several invited senior herpetologists will gather at this special reception for student members of SSAR and HL. Finger food and drink tickets will be provided.

## Joint Meeting Reception - Albuquerque Museum of Art & History

### Thursday, 11 July - 6:00 - 9:00 p.m.

This year's Joint Meeting opening reception will be at the Albuquerque Museum of Art and History. Accredited by the American Association of Museums, The Museum is supported by the City of Albuquerque and the Albuquerque Museum Foundation. The Museum's purpose is to share knowledge and appreciation of art and history, collect and preserve objects of historic and artistic interest, and encourage continued excellence of the cultural life of the community. For over forty years, The Albuquerque Museum of Art and History has provided a rich cultural voice in Albuquerque, the state of New Mexico and the Southwest region. It continues to inspire the community through exhibitions on local history and art, while also attracting exhibitions from major institutions around the world. The Museum's regional art collection focuses on the American Southwest, and its history and photoarchive collections primarily relate to the life and culture of Albuquerque and the middle Rio Grande Valley.

The Joint Meeting reception is included in all full conference, first exhibitor representative, and accompanying persons registration fees. All others must purchase a reception ticket. Additional guest reception tickets are \$50 each.

Shuttles will depart from Dr. Martin Luther King Jr. Drive outside of the East Complex of the Albuquerque Convention Center starting at 5:45 p.m. and will run continuously until 7 p.m. The shuttle buses will start departing from the Albuquerque Museum of Art & History starting at approximately 7:30 p.m. and will run continuously until 9 p.m. Buses will drop participants off at the Hotel Blue, Hyatt Regency or DoubleTree.

## **Social Events (continued)**

### **AES Student Social - Offsite Location TBD**

**Saturday, 13 July - 7:30 p.m.**

Join your fellow AES students for an informal social. The location will be announced at the meeting, or you can check the AES Office in Tijeras located on the Upper Level East complex of the Albuquerque Convention Center.

### **HL/SSAR Live Auction - Brazos/Galisteo/Aztec**

**Sunday, 14 July - 9:00 p.m.**

The HL/SSAR Live Auction is an opportunity to support the programs of SSAR and HL and to clean out your office or house of those interesting and valuable herp related items. Any herp related item - including books, art, sculptures, famous autographs, field equipment, or clothing - is appreciated. Please note that items made from amphibians, reptiles, or parts thereof, should NOT be donated. Donations are tax deductible. Receipts will be issued on request (please request receipt at time of donation).

### **AES Banquet - Barcelona, Hotel Andaluz**

**Sunday, 14 July - 6:00 p.m. - midnight**

**Go to the AES Office in La Cienega, Upper Level East, for ticket prices**

On Sunday, 14 July, from 6:00 p.m. - midnight., the American Elasmobranch Society Banquet will be held in the Barcelona Room of the Hotel Andaluz, located just a couple of blocks from the Albuquerque Convention Center. The social hour will start at 6:00 p.m., with dinner served at 7:00 p.m. Stop by the AES Store to find out about the menu. Wine will be served with dinner, plus cash bars will be available. Tickets can be purchased at the meeting in the AES Store located in Tijeras, Lower Level East complex of the Albuquerque Convention Center. Please make sure to purchase your tickets early so that final numbers can be provided to the caterer.

### **JMIH Closing Banquet - Ballroom C, Albuquerque Convention Center**

**Monday, 15 July - 6:00 - 10:00 p.m.**

**\$45 Students; \$65 Professionals**

On Monday, 15 July from 6:00 - 10:00 p.m., the JMIH Closing Banquet will be held in Ballroom C of the Albuquerque Convention Center. The social hour will start at 6:00 p.m., with dinner served at 7:00 p.m. The menu will consist of a salad of mixed baby greens, tomato, english cucumbers, shredded carrots, and garlic croutons with ranch or raspberry vinaigrette, rolled shredded beef enchiladas with red chile, rolled green chile chicken enchilada, calabacitas (medley of fresh squash and corn), black beans, small flour tortillas, flan, and iced tea and coffee. Vegetarians will be served blue corn cheese enchiladas with spinach filling served with red chile instead of the beef and chicken enchiladas. Wine will be served with dinner, plus cash bars will be available.

Be sure to bring your ticket for admission and give it to a volunteer at the doors when you enter the ballroom for the banquet.

## Business and Committee Meetings

**Note: all meeting rooms listed below are located in the Albuquerque Convention Center, unless otherwise indicated.**

### Wednesday, 10 July

8 a.m. - 2 p.m.	SSAR Board of Directors Meeting - Acoma/Tesuque/Zuni (Lunch provided)
8 a.m. - Noon	AES Executive Committee - Taos (Lunch provided)
9 a.m. - 2 p.m.	ASIH Executive Committee - San Juan (Lunch provided)
2 p.m. - 5 p.m.	ASIH Editorial Policy Committee - Isleta/Jemez
2 p.m. - 5 p.m.	AES Board of Directors - Taos
2 p.m. - 6 p.m.	HL Board of Trustees Meeting - Laguna
5 p.m. - 7 p.m.	ASIH Board of Governors - San Miguel
7 - 8 p.m.	SSAR President's Travelogue - Brazos/Galisteo/Aztec
7 p.m. - until close	Informal No-Host Social - Hotel Lobby Bars

### Thursday, 11 July

Noon - 2 p.m.	AES Student Business Meeting - Off-site location TBA
Noon - 2 p.m.	ASIH Judges Meeting - Laguna (Lunch provided)
Noon - 2 p.m.	ASIH Conservation Committee - Taos (Lunch provided)
Noon - 2 p.m.	SSAR Seibert & Poster Judges Meeting - Isleta/Jemez (Lunch provided)
Noon - 2 p.m.	ASIH Endowment & Finance Committee - San Juan (Lunch provided)

### Friday, 12 July

9:30 - 10:30 a.m.	HL Awards Committee - Taos
3 - 5 p.m.	ASIH Collections Committee - Laguna
6 - 8 p.m.	HL Business Meeting - Brazos
6 - 8 p.m.	ASIH Speed Networking Event - Santa Ana/Sandia/Picuris
8 - 9 p.m.	Copeia 100th Anniversary Speaker - Doña Ana/Cimarron

### Saturday, 13 July

Noon - 1:30 p.m.	ASIH Graduate Student Business Meeting - Acoma/Tesuque/Zuni (Lunch provided)
Noon - 1:30 p.m.	AES Graduate Student Workshop - Mesilla
Noon - 2 p.m.	JMIH Meeting Management and Planning Committee - San Juan (Lunch provided)
Noon - 3 p.m.	ASIH Names of Fishes - Isleta/Jemez (Lunch provided)
2 - 5 p.m.	SSAR Long Range Planning Committee - Laguna
3 - 4 p.m.	AES Business Meeting - Mesilla
4 - 6 p.m.	ASIH Web Content Management Committee - Isleta/Jemez
5 - 6:30 p.m.	ASIH Long Range Planning Committee - San Juan
6 - 8 p.m.	SSAR Business Meeting - Galisteo/Aztec
6 - 8 p.m.	NIA Meeting - Doña Ana/Cimarron

### Sunday, 14 July

Noon - 1:30 p.m.	ASIH Graduate Student Workshop - Isleta/Jemez
6 - 8 p.m.	ASIH Business Meeting - Mesilla





# Symposia

**Friday, 12 July**

8:00 a.m. - 4:00 p.m.

## **AES**

***Biology, ecology and management of durophagous stingrays***

**Room: Mesilla**

Known for their large-scale migrations, surface schooling behaviors and impressive durophagy, the myliobatid and rhinopterid stingrays have long fascinated naturalists and researchers worldwide. However, studies of the biology and ecology of these animals have considerably lagged behind other groups of marine fishes. The large data gap in durophagous stingray research has impeded the development of management measures for these species despite recently increased exploitation of rays by artisanal fisheries and the rising number of kill tournaments targeting these animals. The specific goals of this symposium are to: 1) assess the current state of knowledge on durophagous ray natural history, 2) reveal the latest techniques to study the behavioral ecology of these rays, 3) explore connectivity and stock structure of ray populations around the globe, and 4) encourage sustainable use of rays throughout world oceans. Through this process we will highlight the importance of this group of fishes in marine ecosystems while broadening our understanding of elasmobranch biology and ecology. Ultimately, it is hoped that this symposium will provide timely life history data critically needed by managers to better sustain these species, many of which are experiencing heavy anthropogenic pressure around the world.

**Organizers: Matthew J. Ajemian & Julie A. Neer**

**Friday, 12 July**

8:15 a.m. - 4:45 p.m.

## **HL**

***Detectability and studying rare species: when cryptic natural histories defy both conventional and progressive statistics***

**Room: Brazos**

Occupancy modeling using presence-absence data has emerged as the most robust, versatile, and unbiased analytical tool for studying populations of intractable species of reptiles, amphibians, and fishes. When unbiased estimates of parameters such as abundance, species richness, or extinction probability are required to make management decisions, accounting for imperfect detection is critical. Explaining heterogeneity in parameter estimates relative to varying characteristics of sites, samples, or species is also of great interest. Researchers who have been frustrated by the difficulties of mark-recapture of rare or cryptic species will be excited to learn about new techniques using presence-absence data to apply to their study system. Presentations will include case studies from field biologists as well as theoretical approaches to problems of imperfect detection, and presenters will make recommendations about study design, software, analysis, and applications to conservation and management.

**Organizers : Andrew Durso & Richard A. Seigel**

## Symposia (continued)

**Saturday, 13 July**

8:30 a.m. - 4:30 p.m.

### **ASIH**

***Fish out of Water: evolutionary and ecological issues in the conservation of fishes in water-altered environments***

#### **Room: Brazos**

Human impacts on aquatic ecosystems are wide-ranging and often extreme. For instance, over half of the world's large rivers (i.e., those with virgin mean annual discharge of at least 350 m<sup>3</sup>s<sup>-1</sup>) are strongly affected by dams (Nilsson et al. 2005). Of the 74 large North American rivers, 39 (53%) are moderately to strongly affected by impoundments or flow regulation (Dynesius and Nilsson 1994). In North America, rivers that are not strongly impacted by human alterations are disproportionately located in areas of low human population density—extreme northern areas of Alaska and Canada. Similarly, many coastal marine habitats have been greatly altered by shoreline development, changes in inflow, and other anthropogenic influences (Partyka and Peterson 2008; Bulleri and Chapman 2010).

Although it is clear that direct (e.g., water withdrawal; impoundments; shoreline development; nutrient enrichment; toxic runoff) and indirect (e.g., introduction of nonnative organisms; global warming) human impacts have greatly altered many freshwater and coastal marine environments, until very recently ecological studies as well as most recovery and management plans for listed species have considered species as static units that are not comprised of locally evolving populations. An important exception is the attention given to short-term evolutionary responses of commercially exploited fishes (Loder 2005; Williams et al. 2008). The general appreciation that evolutionary dynamics are affecting communities in "ecological time" is much more recent and has occurred because of the understanding that evolution can occur over ecological time scales. The interaction between ecology and evolution within an ecological time frame is referred to as eco-evolutionary dynamics, with the major precept that both directions of effect, ecology to evolution and evolution to ecology, are substantial (Johnson et al. 2009; Bassar et al. 2010; Schoener 2011). Recognition of the interplay of short and long-term evolutionary processes within a matrix of ecological interactions among species is currently leading to an exciting link between community ecology and evolutionary biology, although few studies as yet have documented the strength of the evolution to ecology pathway (Johnson and Stinchcombe 2007; Schoener 2011).

The intent of this symposium is to invite speakers who can contribute to the understanding of short term ecological changes (including where such changes are most likely to occur) and to highlight aspects of eco-evolutionary dynamics of fish assemblages in human-altered freshwater and coastal marine habitats. The benefit of this symposium to society is to provide a forum for understanding interactions between community-level processes and rapid (i.e., in ecological time) evolutionary changes. That is, in our efforts to conserve aquatic life, how are the targets of our conservation efforts altered by rapid evolutionary responses to their highly altered environments.

**Organizer: Stephen T. Ross**

**Co-organizers: Thomas Turner & Keith Gido**

## Symposia (continued)

**Saturday, 13 July**

8:00 a.m. - 4:00 p.m.

### **SSAR**

#### ***Impact of energy development on amphibians and reptiles in North America***

##### **Room: Galisteo/Aztec**

The purpose of this symposium, co-sponsored by Partners in Amphibian and Reptile Conservation (PARC), is to examine the potential effects of traditional and renewable energy developments on amphibians and reptiles in North America and to identify appropriate research needs, tools and management recommendations. While there have been several recent studies on the impacts of energy developments on wildlife (bats, greater sage-grouse, lesser prairie-chicken, mule deer, pronghorn, and songbirds), few studies have focused on the impacts these developments are having on amphibians and reptiles or their habitats. Reliable baseline data are needed on amphibian and reptile population densities and distributions over large portions of North America before the effects of energy development can be examined.

The panel of speakers that PARC has assembled for this symposium will communicate the size, scope, and potential physical, biological, cultural and economic impacts of energy projects to set the stage for a more focused discussion with regard to impacts on amphibians and reptiles. They will discuss known and potential impacts of various energy developments and propose solutions to eliminate, minimize, and mitigate those impacts. Because little research has been completed to date on amphibian and reptile populations with respect to energy development, speakers will synthesize and draw inferences from research completed on the effects of various energy developments on the habitats known to support populations of amphibians and reptiles.

**Organizer: Dr. Jeff Lovich**

**Co-Organizer: Priya Nanjappa**

# Symposia (continued)

**Sunday, 14 July**

8:15 a.m. - 4:00 p.m.

**Monday, 15 July**

8:00 a.m. - 4:30 p.m.

## **ASIH**

### ***Fishes and Morphology Today***

#### **Room: Brazos**

From its inception in the 1700s, the study of fishes has been linked to morphological characters. The foundation of Ichthyology, as revealed by the pioneering works of Petrus Artedi, "The Father of Ichthyology" (1705-1735) and Carolus Linneaus (1707-1778), relied fundamentally on external structures considered at that time to be key elements to identify fishes. Morphological characters supported the development of the first taxonomic studies and classifications. The initial attempt to form a classification of fishes was based uniquely on one or a few structures, e.g., fins, scales. Over the next 260 years, the study of fishes bloomed from these modest beginnings to lead us to the knowledge of fishes we have today. Our understanding of the systematics and relationships of fishes is based fundamentally on morphology. Organisms are not the only things that evolve—the way to study them evolves as well, and fishes and ichthyologists are no exception. Over the course of almost three centuries our comprehension of fishes and their putative evolutionary relationships has been influenced and advanced by new methods in preparation of material, new equipment and technology, new methods of observation and interpretation and progressive evaluation and re-evaluation of characters. This era of morphological exploration and enlightenment has been characterized by extensive improvements. As we move forward, continued progress in morphological studies of fishes must flourish if we are to make further progress in our understanding of the complex evolutionary history of the over 29,000 extant species of fishes.

Despite the fact that morphological studies and interpretations form the permanent foundation of Ichthyology, they seem to have become dangerously devalued in light of new approaches and methodologies, specifically those involving molecular data. Currently, fish taxonomy and systematics based on studies of phenotype are in a precarious state, and we are facing a continuing decline in the number of professionals involved in this field. Accordingly, our primary goal with this symposium is to validate for the scientific community the vital importance of morphological studies for fish systematics and taxonomy and to clearly demonstrate to students that this dynamic field is a permanent and fundamental underpinning of any fish classification and actually every aspect of ichthyology research. To reach this goal we plan to present select talks addressing the following aspects:

1. The study of phylogenetic relationships of certain groups (e.g., order, family, genus) based on new morphological characters and/or reinterpretations of previous ones (and discussion of previous hypotheses when available).
2. Discovery of new character(s) and new interpretations that are significant to the understanding of a certain fish group or fish groups.
3. Analysis and discussion of the evolutionary transformation of a specific structure (e.g., evolutionary transformations of the premaxillary bone in actinopterygians).
4. Analysis and discussion of some specific homology problems and their importance in systematics.

Our goal is to promote morphological research and not to provide a forum in which to attack molecular research, the value of which we do not question. This symposium is meant to showcase the results of current morphological studies and their impact on our understanding of fishes and their evolutionary history. We intend to make the point that despite the current development of molecular studies, morphology remains a key element in taxonomic, systematic and evolutionary studies of fishes (as well as other organisms).

**Organizers: Dr. Gloria Arratia & Dr. G. David Johnson**

# Workshops

**Saturday, 13 July**

12:00 - 1:30 p.m.

## **AES Graduate Student Workshop**

***Addressing the 'who cares' and broader impacts of your research***

**Room: Mesilla**

Increasingly common questions faced by scientists in all disciplines are 'What are the broader impacts of your research?' and 'Why should we care?' These questions are posed from a diverse array of sources (grant applications, job interviews, media, etc.) and reflect a general shift from fundamental, to more applied scientific thinking. If your research is quite specific and is neither easy to explain or to distribute to a wide audience, the broader implications of your work might be lost on others and may make it difficult to be competitive in getting grants and employment opportunities. Learning the full spectrum of criteria that fall under the term 'broader impacts,' and being able to tailor your comments to target different interest groups is therefore a useful, but rarely taught skill. This workshop aims to explore the ways in which you can effectively articulate the wider importance and societal benefits of your research, as well as providing a forum for discussion on the topic with an

**Presenters: Carl Luer, Toby Daly-Engel, Kara Yopak, and Demian Chapman**

**Saturday, 13 July**

6:00 - 9:00 p.m.

## **Workshop**

***Communicating Science: Adapting Your Work for Policy Boards, Publics, and Peers***

**Room: Nambe/Navajo**

Apprehensive about what to do after you earn your degree? Join us at this year's ASIH Graduate Student Organization workshop to ask the experts how to take that next step. Understanding a stakeholder audience's needs and expectations is a critical component of effective science-related communication. Policy boards, multiple stakeholder publics, and peer groups all read information differently based on their understanding of specialized material, their education, their cultural identification(s), and their level of investment with a topic. By learning what types of information to present (statistical, graphical, textual), how to frame that information, and what information to include—or not—in a discussion or report, a specialist may increase their chances for positive reception of their work.

This 3-hour workshop is designed to help both professionals and graduate students learn how to analyze potential audiences for their work, then shape their writing and presentation styles for maximum impact. Attendees are encouraged to bring copies of their ongoing projects.

scientific career. Whether you are looking for a post-doc assistantship, teaching job, museum position, or a job with a government agency, our panel of experts can answer your inquiries and help guide you to finding the job you want. Pizza and sodas will be provided during the break.

NOTE: Pre-registration was required. This workshop is full.

**Presenter: Derek G. Ross, PhD**

**Sunday, 14 July**

12:00 - 1:30 p.m.

**ASIH Graduate Student Workshop**

***How to Prepare for Academic Interviews***

**Room: Isleta/Jemez**

This year's ASIH graduate student workshop will feature a panel of professionals that have had recent interviewing experience and/or participated in search committees for jobs in academia. Our panel will provide good advice, tips, and some fun stories. If you are interested in pursuing a career in academia, then we highly recommend this workshop.

**Panelists: Mo Donnelly, Micheal Douglas, Chris Beachy, Alan Savitsky, and John (J.D.) Wilson**

## SESSION AND SYMPOSIA MASTER

SESSION AND SYMPOSIA MASTER						
		THURSDAY 11-Jul	FRIDAY 12-Jul	SATURDAY 13-Jul	SUNDAY 14-Jul	MONDAY 15-Jul
	ROOM					
AM	Brazos	PLENARY (Brazos/Galisteo/ Aztec)	HL Detectability Symposium	ASIH Fish Out of Water Symposium	ASIH Fishes & Morphology Symposium I	ASIH Fishes & Morphology Symposium II
	Doña Ana/ Cimarron	↓	ASIH Stoye Ecology & Ethology	General Ichthyology	Fish Biology/ Fish Systematics & Biogeography	NIA Oral Papers
	Galisteo/ Aztec		Amphibian Conservation/ SSAR Seibert Conservation	SSAR Effects of Energy Development on Herps Symposium	Herp Behavior/ Amphibian Conservation	Herp Ecology II
	Ruidoso/ Pecos		Fish Genetics I/ ASIH Stoye General Ichthyology II	Amphibian Conservation/ Herp Morphology & Histology	Herp Conservation	Herp Biogeography
	San Miguel		SSAR Seibert Systematics & Evolution II/ Herp Systematics	Herp Genetics & Ecology	AES Conservation/ AES Behavior	General Herpetology
	Mesilla		AES Stingray Symposium	AES Gruber Award Papers	AES Reproduction/ AES Morphology & Physiology	Reptile Ecology
			LUNCH	LUNCH	LUNCH	LUNCH
PM	Brazos	SSAR Seibert Ecology I	HL Detectability Symposium	ASIH Fish Out of Water Symposium	ASIH Fishes & Morphology Symposium I	ASIH Fishes & Morphology Symposium II
	Doña Ana/ Cimarron	SSAR Seibert Systematics & Evolution I/ Fish Conservation	ASIH Stoye Ecology & Ethology/ ASIH Stoye General Herpetology	Euteleost Tree of Life/ Fish Development	Fish Ecology	
	Galisteo/ Aztec	Fish Systematics I	SSAR Seibert Physiology & Morphology	SSAR Effects of Energy Development on Herps Symposium	Herp Ecology I	Fish Behavior
	Ruidoso/ Pecos	ASIH Stoye General Ichthyology I	ASIH Stoye Genetics, Development & Morphology	Snake Conservation	Herp Development & Reproduction	
	San Miguel	HL Graduate Student Award	SSAR Seibert Ecology II	Herp Systematics & Evolution	Fish Conservation	
	Mesilla	AES Ecology	AES Stingray Symposium	AES Gruber Award Papers	AES Systematics & Genetics	
	POSTER SESSIONS		POSTER I	POSTER II	POSTER III	
	BUSINESS MEETINGS (Rooms vary)		HL (6 - 8 p.m.)	AES (3:15 - 4 p.m.) SSAR (6 - 8 p.m.) NIA (6 - 8 p.m.)	ASIH (6 - 8 p.m.)	
EVE	SOCIAL EVENTS	JMIH OPENING RECEPTION (6 - 9 p.m.) Albuquerque Museum of Art & History			AES BANQUET Hotel Andaluz (6 p.m. - midnight)  SSAR/HL LIVE AUCTION (9 p.m. - midnight) Brazos/Galisteo/ Aztec	JMIH BANQUET (6 - 10 p.m.) Albuquerque Convention Center Ballroom C



# Thursday, 11 July

## Morning Plenary Session

### Brazos/Galisteo/Aztec, Albuquerque Convention Center

- 8:00 AM**      **Welcome**  
Dr. Chaouki Abdallah, Provost & Executive Vice President for Academic Affairs, University of New Mexico
- 8:20 AM**      **Award Presentations**  
ASIH Gibbs, Fitch and Johnson Awards  
SSAR/HL/ASIH Meritorious Teaching Award in Herpetology  
PARC Alison Haskell Award for Excellence in Herpetofaunal Conservation  
Joseph Nelson Award
- 8:50 AM**      **Introduction for Keynote Speaker**
- 9:00 AM**      **William deBuys, JMIH Plenary Keynote Speaker**  
**"Hotter and Drier: Life in the 21st Century Southwest"**
- 10:00 AM**      **Beverage Break**
- 10:30 AM**      **AES Plenary Speaker:**  
**"Unraveling the Secret Lives of Sharks and Rays"**  
Gregor M. Caillet, Moss Landing Marine Laboratories
- 10:50 AM**      **HL Distinguished Herpetologist:**  
**"HistoHerpetologist"**  
David Sever, Southeastern Louisiana University
- 11:10 AM**      **ASIH Past Presidential Address:**  
**"Physiological Ecology: Past, Present, and Future"**  
Steven J. Beaupre, University of Arkansas
- 11:30 AM**      **Closing and Announcements**  
100th Anniversary of Copeia  
Group photo location  
SSAR and other society Announcements



2013 Joint Meeting (JMIH), Albuquerque, NM  
**BREAK-OUT SESSIONS AT A GLANCE**  
**THURSDAY, 11 JULY, Afternoon Sessions**

	<i>Ruidoso/Pecos</i>		<i>San Miguel</i>		<i>Mesilla</i>	<i>ROOM</i>
	<b>ASIH Stoye General Ichthyology I</b>		<b>HL Graduate Student Award</b>		<b>AES Ecology</b>	<b>SESSION/ SYMPOSIUM</b>
	<b>Mark Pyron</b>		<b>Meredith Mahoney</b>		<b>Marcus Drymon</b>	<b>MODERATOR</b>
449	<b>S Ferdous</b>	766	<b>E Chambers</b>	106	K Stump	<b>1:30 PM</b>
	Molecar phylogeny of catfish genu <i>Mystus</i> Scopoli (Siluriformes:Bagridae)		Museums, molecular methods, and misidentification: DNA barcoding North American herpetofauna		Effects of Habitat Loss in a Shark Nursery: Community Characterization Before and After a Disturbance	
531	<b>A Thomaz</b>	95	<b>A Nicholson</b>	632	I Hamilton	<b>1:45 PM</b>
	Testing the combined effect of sea-level changes and habitat stability on genetic differentiation in a freshwater Neotropical fish		Seasonal Variation and Modifications of the Genital Kidney Nephrons in <i>Notophthalmus viridescens</i>		Examining the Parameters Affecting the Distribution of Juvenile Lemon Shark Populations in Mangrove Creek Systems	
192	<b>M Stachowski</b>	167	<b>D Davis</b>	188	C Peterson	<b>2:00 PM</b>
	Insights into Ilyodon: Phylogeography from South of the Border		Morphology-based Species Delimitation in Philippine Slender Skinks: Evaluation of the <i>Brachymeles bonitae</i> Complex		Sharks and Large Teleosts of Florida's Big Bend: Abundance, Distribution, and Community Structure	
75	<b>B Ludt</b>	318	<b>S Harrington</b>	497	M McCallister	<b>2:15 PM</b>
	Relationships within the surgeonfish genus <i>Prionurus</i> with comments on biogeography and evolutionary history		Inferring Basal Snake Phylogenetic Relationships Using Molecular, Morphological, and Fossil Data		Identifying a Scalloped Hammerhead Nursery in the Inshore Waters of NE Florida	
48	<b>M Tan</b>	457	<b>K Smith</b>	249	M Drymon	<b>2:30 PM</b>
	What is Miniaturization?: Lack of Miniaturization in the Evolution of Body Size in a Group Including Some of the Smallest Fishes in the World (Danioninae: Cyprinidae)		Radio telemetry and the neonate ecology of the Northern Pinesnake ( <i>Pituophis melanoleucus</i> )		Multi-scale Investigation of the Factors Affecting the Distribution of Sharks in the Gulf of Mexico	
19	<b>M Schwemm</b>	179	<b>D Ward</b>	260	J Davis	<b>2:45 PM</b>
	Evolution of the Upland Fish Fauna of Southern Oklahoma: Insights from a Phylogeographic Study of <i>Notropis suttkusi</i>		Population Estimate of the Northern Pine Snake in the New Jersey Pinelands		The Bull Sharks of Lake Pontchartrain	
<b>BREAK - NW Exhibit Hall</b>						<b>3:00 PM</b>
	<b>ASIH Stoye General Ichthyology I</b>		<b>HL Graduate Student Award</b>		<b>AES Ecology</b>	<b>SESSION/ SYMPOSIUM</b>
	<b>Marlis Douglas</b>		<b>Stan Trauth</b>		<b>Joe Bizzaro</b>	<b>MODERATOR</b>
430	<b>H Owens</b>	489	<b>C Casto</b>	133	G Poulakis	<b>3:30 PM</b>
	A Phylogentic Approach to Niche Evolution in Gadine Fishes		Survivorship of Ploidy-Variabile Unisexual <i>Ambystoma</i> Salamanders Across Stages of Development		Use of Stable Isotopes to Infer Feeding Habits and Ontogenetic Diet Shifts by the Endangered Smalltooth Sawfish ( <i>Pristis pectinata</i> ), in Florida	
503	<b>A Geheber</b>	180	<b>N Wilson</b>	66	B Frazier	<b>3:45 PM</b>
	Phylogenetic Structure in Darter Assemblages: Identifying Ecological Processes Through Evolutionary Relationships		Predator-Prey Interactions: Common Invertebrate Predators of Native Amphibian Eggs and Tadpoles in South Australia		Validated Age and Growth of the Bonnethead, <i>Sphyrna tiburo</i> , in the western North Atlantic Ocean	
155	<b>J Denton</b>	723	<b>S Rumschlag</b>	619	J Cochran	<b>4:00 PM</b>
	Covariation patterns of symmetric and asymmetric shape features in the lanternfish tribes <i>Myctophini</i> and <i>Gonichthyini</i> (Scopelomorpha; Myctophidae; Myctophinae)		How Time of Exposure to the Amphibian Chytrid Fungus affects Cope's Gray Treefrogs ( <i>Hyla chrysoscelis</i> ) in the Presence of an Insecticide		Habitat Use in Aggregating Red Sea Whale Sharks	
495	<b>J Cureton II</b>	468	<b>S Webb</b>	177	A Carlisle	<b>4:15 PM</b>
	Flow-induced phenotypic variation in <i>Pimephales</i> spp. (Cyprinidae)		Toxicological testing in Loggerhead Sea Turtle ( <i>Caretta caretta</i> ) primary skin cell cultures		Use of the California Current as a nursery area by juvenile salmon sharks	
502	<b>C Moran</b>			652	J Bizzaro	<b>4:30 PM</b>
	My, what big eyes you have! Do non-native species in the Colorado River basin have a greater reliance on vision, relative to native fishes?				Comparative spatial associations of skates ( <i>Rajidae</i> ) off central California	
				656	C Braun	<b>4:45 PM</b>
					Telemetry techniques elucidate Manta alfredii ecology in the eastern Red Sea	
				552	J Kilfoil	<b>5:00 PM</b>
					Assessment of shore based angling on sand tiger behavior: Implications for recovery	
				441	D Figueroa	<b>5:15 PM</b>
					Estimating the geographic range of a threatened shark in a data-poor region: <i>Cetorhinus maximus</i> in the South Atlantic Ocean	

2013 Joint Meeting (JMIH), Albuquerque, NM  
**BREAK-OUT SESSIONS AT A GLANCE**  
**FRIDAY, 12 JULY, Morning Sessions**

ROOM		<i>Brazos</i>		<i>Doña Ana/Cimarron</i>		<i>Galisteo/Aztec</i>
<b>SESSION/ SYMPOSIUM</b>		<b>HL Detectability Symposium</b>		<b>ASIH Stoye Ecology &amp; Ethology</b>		<b>Amphibian Conservation</b>
<b>MODERATOR</b>		<b>Andrew Durso</b>		<b>Bernard Kuhajda</b>		<b>Sarah Corey-Rivas</b>
<b>8:00 AM</b>			507	<b>J Zeyl</b>	562	S Corey-Rivas
				Acoustic Communication in the Banded Sculpin, <i>Cottus carolinae</i>		Using Phylogenetic Signal in Assessments of Amphibian Extinction Risk
<b>8:15 AM</b>		Introduction	107	<b>D Lynch</b>	527	C Paszkowski
				Distribution and Abundance of the Endangered Yellowcheek Darter in the Little Red River Drainage of Arkansas		Using Automated Acoustic Recorders to Model the Occurrence and Habitat Associations of Anuran Amphibians in Northern Alberta, Canada
<b>8:30 AM</b>	308	L Bailey	140	<b>S Miyazono</b>	353	M Sredl
				Effects of Natural Stream Fragmentation on Desert Fish Metacommunities		Calibrating Our Progress Towards Recovery of Amphibian Populations: an Area-based Approach and Occupancy Modeling
<b>8:45 AM</b>		Estimating population vital rates: insights from species with complex life histories	465	<b>P Wieczorek</b>	267	C Salice
				Can morphology be used to accurately predict the successfulness of invasive species? A case study in the Mobile Basin		Risks of Pesticides to Amphibians: Are Widely Available Fish Toxicity Data Protective or Not?
<b>9:00 AM</b>	510	D MacKenzie	567	<b>B Spies</b>	258	R Van Meter
				Temperature-mediated variation in larval traits of a seasonally closed estuary specialist fish: how much does latitude matter?		Pesticide Uptake Across Amphibian Dermis after Simulating an Aerial Overspray
<b>9:15 AM</b>		Occupancy models: not all moonbeams and sunshine	709	<b>B Sanchez</b>	159	J Stabile
				Impact of organic pollutants on the growth and fecundity of <i>Paralabrax nebulifer</i> (barred sand bass) from Southern California		Several Aspects of the Biology of the Mona Island Coqui ( <i>Eleutherodactylus monensis</i> )
<b>9:30 AM</b>		<b>BREAK - NW Exhibit Hall</b>				
<b>SESSION/ SYMPOSIUM</b>		<b>HL Detectability Symposium</b>		<b>ASIH Stoye Ecology &amp; Ethology</b>		<b>SSAR Seibert Conservation</b>
<b>MODERATOR</b>		<b>Andrew Durso</b>		<b>Mel Warren</b>		<b>Bob Brodman</b>
<b>10:00 AM</b>	276	G Rodda	719	<b>A Belasen</b>	681	<b>T Ghandorouh</b>
				Effect of Subcanopy on Habitat Selection in the Blue-spotted Salamander ( <i>Ambystoma laterale-laterale-jeffersonianum</i> unisexual complex)		Assigning Conservation Priorities to Sites for Threatened Species of Lygosomatine Skinks and Diplodactylid Geckos in the Grand Sud, New Caledonia
<b>10:15 AM</b>		Stability of detection probabilities over 17 years at a single site	688	<b>J Stroud</b>	237	<b>P Vogrinc</b>
				Habitat niche partitioning in two tropical leaf-litter lizards (Scincidae)		Variation in Effectiveness Among Commonly-Used Sampling Techniques Influences Accurate Assessment of Community Composition and Abundance of Semi-aquatic Snakes
<b>10:30 AM</b>	513	J Willson	563	<b>C Howey</b>	286	<b>T Luckau</b>
				Snake on Fire: Habitat Use, Energy Expenditures, and Body Condition of Black Racers in Burned and Unburned Landscapes		Comparative Population Genetics of Two Species of Co-Distributed Lizards, <i>Sceloporus occidentalis</i> and <i>Aspidoscelis hyperythra</i>
<b>10:45 AM</b>		More than Nuisance Parameters: Detection Parameters as Indicators of Behavior and Abundance in Aquatic Snakes	399	<b>A Berkey</b>	575	<b>K Neal</b>
				Influence of Kinship on Fine-scale Spatial Distribution of Four-toed Salamander, <i>Hemidactylum scutatum</i>		Comparing Population Genetic Structure in Two Sympatric New Caledonian Lizards: Implications for Conservation in a Mining-impacted Region
<b>11:00 AM</b>	731	A Yackel Adams	362	<b>G Bury</b>	435	<b>R Stiles</b>
				Aggressive Behavior in the Western Pond Turtle on Stable and Rolling Logs		Amphibian Response to Restored Prairie Potholes
<b>11:15 AM</b>		Modeling Visual Detection Probabilities of an Invasive Snake: What have we Learned and What Insights do we Gain from Study Replication?	197	<b>M Holden</b>	153	<b>J Baxter-Gilbert</b>
				The Synergistic Effects of Multiple Stressors on Amphibian Larvae		On The Road Again: The Effectiveness of Mitigation Structures for Reducing Reptile Road Mortality and Maintaining Habitat Continuity
<b>11:30 AM</b>	125	S Price	6	<b>R Ligon</b>		
				Chameleon color change: Evidence for communication via rapid chromatic transformation		
<b>11:45 AM</b>		Detection and Occupancy Estimates of Anuran Amphibians: The Manual Calling Survey and Beyond				
<b>12:00 PM</b>		<b>LUNCH</b>		<b>LUNCH</b>		<b>LUNCH</b>

2013 Joint Meeting (JMIH), Albuquerque, NM  
**BREAK-OUT SESSIONS AT A GLANCE**  
**FRIDAY, 12 JULY, Morning Sessions**

	<b>Ruidoso/Pecos</b>		<b>San Miguel</b>		<b>Mesilla</b>	<b>ROOM</b>
	<b>Fish Genetics I</b>		<b>SSAR Seibert Systematics &amp; Evolution II</b>		<b>AES Stingray Symposium</b>	<b>SESSION/ SYMPOSIUM</b>
	<b>Matt White</b>		<b>Sara Ruane</b>		<b>Sonja Fordham</b>	<b>MODERATOR</b>
134	M White	638	J Titus-McQuillan - S	65	J Neer	8:00 AM
	Distribution and Evolutionary History of the Native Walleye in the Ohio River Drainage		Phylogenetic Relationships Among African Shovel-nose Snakes (Serpentes: Lamprophiidae)		A multi-decade review of durophagous stingray research: from eradication to conservation	
439	M Jordan	746	A Geneva - S	85	N Aschliman	8:15 AM
	Contemporary Land Use and Post-Glacial Range Expansion Contribute to Genetic Variation in Creek Chub ( <i>Semotilus atromaculatus</i> ) Populations in an Agriculturally Dominated Watershed		Reproductive Isolation in Anolis lizards		Evolution of the durophagous stingrays (Batoidea: Myliobatidae)	
443	E Lescak	374	I Brennan - S	73	M Kolmann - G	8:30 AM
	Phenotypic and Genotypic Variation in Young Threespine Stickleback Populations from Prince William Sound and the Gulf of Alaska		Phylogeography of Delma (Squamata: Gekkota: Pygopodidae) in Arid and Semi-arid Australia		Ecomorphology of Durophagy in Myliobatiform Rays - Muscle Anatomy and Feeding Performance	
670	C Dillman	341	P Skipwith - S	36	C Bedore	8:45 AM
	Forensic investigations into a Genbank anomaly: Endangered Taxa and Missing Vouchers		Diversification Rates of New Caledonian Diplodactylid Geckos Inferred From Concatenated and Coalescent Divergence Time Estimates		Visual biology of cownose rays, <i>Rhinoptera bonasus</i>	
695	T Krabbenhoft	342	B Martin - S	81	J Szczepanski	9:00 AM
	Evolution and ecology of Mongolian grayling species ( <i>Thymallus</i> spp.): an individual-based approach		Molecular Phylogenetics of the American Box Turtles ( <i>Terrapene</i> spp.): A Classification Re-assessment and a Molecular Clock Depicting Divergence Time Estimates		Feeding ecology of the bullnose ray, <i>Myliobatis freminvillii</i> , in Delaware Bay	
781	C Purcell	419	A Kuhn - S	680	S Powers	9:15 AM
	Genetic variability in wild and hatchery populations of California yellowtail, <i>Seriola lalandi</i>		Multilocus phylogeny and phylogeography of the Namib day geckos (Squamata:Gekkonidae: Rhoptropus)		Spatial and temporal patterns of predation by cownose rays determines source and sink locations in bay scallops populations	
<b>BREAK - NW Exhibit Hall</b>						<b>9:30 AM</b>
	<b>ASIH Stoye General Ichthyology II</b>		<b>SSAR Seibert Systematics &amp; Evolution II/ Herp Systematics</b>		<b>AES Stingray Symposium</b>	<b>SESSION / SYMPOSIUM</b>
	<b>Tom Near</b>		<b>Gunther Koehler</b>		<b>Dean Grubbs</b>	<b>MODERATOR</b>
650	P Hollingsworth Jr.	15	A Diaz-Lameiro - S	470	L Bade	10:00 AM
	Explosive diversification following a benthic to pelagic shift in freshwater fishes		Colonization of Islands in the Mona Passage by Endemic Dwarf Geckoes (genus <i>Sphaerodactylus</i> ) Reconstructed with Mitochondrial Phylogeny		A Genetic Technique to Identify the Diet of Cownose Rays, <i>Rhinoptera bonasus</i> : Analysis of Shellfish Prey Items from North Carolina and Virginia	
190	L Bower	409	A Kathriner - S	254	K St. Clair	10:15 AM
	Shaping up: A Geometric Morphometric Approach to Community Ecomorphology		<i>Hemidactylus</i> from Timor provide further evidence of anthropogenic dispersal of <i>H. brookii</i> (Squamata: Gekkonidae)		Results of a captive feeding trial to determine turnover and discrimination of 13C and 15N in epidermis of cownose rays ( <i>Rhinoptera bonasus</i> )	
410	V Espindola	302	N Smolensky - S	130	G Poulakis	10:30 AM
	Taxonomic revision of the western South Atlantic rabbitfishes (Holocephali: Chondrichthyes) with three new records and an undescribed species		Phylogeography of African Dwarf Crocodiles ( <i>Osteolaemus</i> spp.)		Reproductive Biology of the Cownose Ray ( <i>Rhinoptera bonasus</i> ) in the Charlotte Harbor Estuarine System, Florida	
307	Z Randall	511	M Heinicke	584	K Bassos-Hull	10:45 AM
	On the Paraphyly of Homaloptera (Teleostei: Balitoridae)		Phylogeny, Taxonomy, and Biogeography of a circum-Indian Ocean Clade of Leaf-toed Geckos		Biology and Genetics of the Spotted Eagle Ray in the Eastern Gulf of Mexico	
557	D Roje	623	T Jackman	34	J Newby	11:00 AM
	Phylogenetic placement of flatfishes (Percomorpha: Pleuronectiformes) and the phylogenetic utility of three new molecular markers		Implications of the New Caledonian Diplodactylid Gecko Radiation for Coalescent and Concatenated Analyses		An Assessment of Population Genetic and Social Structure in the Spotted Eagle Ray ( <i>Aetobatus narinari</i> ) off Sarasota, FL and the southeastern United States	
603	R Arnold	651	M Medina	686	J McDowell	11:15 AM
	Evolutionary Relationships of the Enigmatic Anglerfishes (Order Lophiiformes): Preliminary Evidence from Nuclear Loci		Systematics of African Skinks in the <i>Panaspis wahlbergi</i> Complex		Species Boundaries and Cryptic Species in Atlantic Rhinopterids: Will the Real <i>R. bonasus</i> Please Stand Up?	
535	R Farr	171	C Linkem	434	M Ajemian	11:30 AM
	Molecular Phylogeny of Cusk-eels (Teleostei: Ophidiiformes: Ophidiidae)		Can phylogenomics provide resolution to the skink tree of life?		SPOT on at the largest of scales: use of towed-float satellite telemetry to track movements and migrations of myliobatid and rhinopterid stingrays	
186	R Singer	24	A Leaché			11:45 AM
	Does your flap hang low? Is it bony or a row? A revision of the genus <i>Acanthocobitis</i> (Teleostei: Nemachilidae) with recognition of the genus <i>Paracanthocobitis</i>		Horned Lizard Phylogeny from Genome-Wide SNP Data			
<b>LUNCH</b>						<b>12:00 PM</b>
			<b>S =SSAR Seibert Systematics &amp; Evolution</b>		<b>G = AES Gruber Award</b>	

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**BREAK-OUT SESSIONS AT A GLANCE**  
**FRIDAY, 12 JULY, Afternoon Sessions**

ROOM		Brazos		Doña Ana/Cimarron		Galisteo/Aztec
SESSION/ SYMPOSIUM		HL Detectability Symposium		ASIH Stoye Ecology & Ethology/ ASIH Stoye General Herpetology		SSAR Seibert Physiology & Morphology
MODERATOR		Richard Seigel		Mo Donnelly		Warren Booth
1:30 PM	166	M Mazerolle	303	B Kraus - EE	269	J Chamberlain
		Estimating Detectability and the Biological Parameters of Interest Using the R Environment		Spatial Ecology and Survivorship of Resident and Translocated Eastern Hellbenders ( <i>Cryptobranchus alleganiensis alleganiensis</i> )		Variation in maternal provisioning of offspring in watersnakes from different resource environments
1:45 PM			198	J Bennett - GH	215	S Green
				Response of spotted salamander ( <i>Ambystoma maculatum</i> ) to Salinity and Temperature		Diet and head shape in snakes: Is there a correlation?
2:00 PM	500	D Miller	330	M Steffen - GH	292	C Peterson
		Using occupancy models to determine the influence of water dynamics on amphibian communities		Pheromone Evolution and Reproductive Isolation in Dusky Salamanders		Gastrointestinal Microbes Do Not Influence Digestive Efficiency in African House Snakes ( <i>Boaedon fuliginosus</i> )
2:15 PM			556	J Feinberg - GH	195	S McCain
				A new cryptic leopard frog from the urban northeast and mid-Atlantic US: a summary of this unexpected discovery and a brief review of the species		Behavioral sensitivity to salinity and osmoregulatory capacity of the fully aquatic salamander, <i>Amphiuma tridactylum</i>
2:30 PM	226	K O'Donnell	463	M Hantak - GH	259	T Clay
		Evaluating the Effects of Forest Management on Terrestrial Salamander Detectability and Abundance		The Role of Chemical Compounds in the Defense Against Predation of Two Neotropical Anurans, <i>Dendrobates auratus</i> and <i>Rhaebo haematiticus</i>		Thermal Sensitivity of Energy Assimilation and Range Limitation in Plethodon
2:45 PM			219	M Ryan - GH	295	J Rearick
				Long-term Intraspecific Population Changes of Five Leaf-litter Frogs at Low and Middle Elevations in Costa Rica		Freeze Endurance: A Novel Measure to Compare Extreme Physiological Tolerances
3:00 PM	200	D Steen	735	S Lambert - GH	312	A Bennett
		How Can We Use Detection Probabilities and Occupancy Modeling to Learn More About Snakes?		A phylogenetic test of the cold-climate hypothesis for the evolution of viviparity in phrynosomatid lizards		Characterizing the Acute and Chronic Stress Response of Tadpoles ( <i>Lithobates sylvaticus</i> ) to Perceived Predation Risk
3:15 PM			602	B Lavin - GH	354	M Dickson
				Glass Lizards, Dirt Dragons, and Slow Worms: Molecular Dating in the Anguinae		Evolution on Your Porch: Rapid Physiological Adaptation by Mediterranean House Geckos to their Introduced Niches
3:30 PM	566	C Shea	590	E Klein - GH	512	L Gray
		Dealing with incomplete detection and misidentification to aid conservation of imperiled freshwater fishes and mussels in the southeastern United States		Biogeographic History and Phylogenetic Relationships of Skinks ( <i>Eumia cyanura</i> Species Group) on South Pacific Islands		Do allometries reveal evolutionary constraints in <i>Anolis</i> lizards?
3:45 PM			297	A Barley - GH	753	E Gren
				Species Delimitation at the Extremes: Diversification Without Morphological Change in Philippine Sun Skinks ( <i>Squamata: Scincidae: Eutropis</i> )		Geographic Variation of Venom Proteins and Neurotoxicity in the Southern Pacific Rattlesnake ( <i>Crotalus oreganus helleri</i> )
4:00 PM	521	A Durso		<b>POSTER SESSION I</b> <b>NW Exhibit Hall</b>		
4:15 PM		Which Snakes Cross the Road and When do They Cross it? Use of a Detectability Analysis on a Long-Term Road Survey Data Set				
4:30 PM		Closing Remarks				
4:45 PM						
5:00 PM						
5:30 PM						
6:00 PM		HL Business Meeting 6-8 p.m.		EE = ASIH Stoye Ecology & Ethology GH = ASIH Stoye General Herpetology		

2013 Joint Meeting (JMIH), Albuquerque, NM  
**BREAK-OUT SESSIONS AT A GLANCE**  
**FRIDAY, 12 JULY, Afternoon Sessions**

	<i>Ruidoso/Pecos</i>		<i>San Miguel</i>		<i>Mesilla</i>	<i>ROOM</i>
	<b>ASIH Stoye Genetics, Development &amp; Morphology</b>		<b>SSAR Seibert Ecology II</b>		<b>AES Stingray Symposium</b>	<b>SESSION/ SYMPOSIUM</b>
	<b>Mike Collyer</b>		<b>Ralph Saporito</b>		<b>John Szczepanski</b>	<b>MODERATOR</b>
53	<b>Z Martin</b>	142	<b>R Dibner</b>	111	J Perez	1:30 PM
	The Papilla Monologues: Comparative Morphology and Evolution of Genital Papillae in a Genus of Darters (Percidae: Etheostoma)		What Limits Horned Lizard ( <i>Phrynosoma hernandesi</i> ) Distribution and Relative Abundance in Wyoming?		The Small-Scale Target Fishery for Spotted Eagle Ray <i>Aetobatus narinari</i> in Southern Gulf of Mexico: Considerations for Management	
522	<b>T Clardy</b>	384	<b>L Williams</b>	99	A Yamaguchi	1:45 PM
	Morphology and Ontogeny of Multiple Lateral Lines in the Prickleback Genus <i>Xiphister</i>		The Use of Chemical Cues by Granite Night Lizards ( <i>Xantusia henshawi</i> ) to Evaluate Potential Predation Threat		Long-term biological study of longheaded eagle ray <i>Aetobatus flagellum</i> in Ariake Bay Japan	
114	<b>C Crawford</b>	496	<b>M Lattanzio</b>	164	R Grubbs	2:00 PM
	Exploring Chondrichthyan Anatomy through Computed Tomography		Life on the Phenotypic Edge: Linking Environmental and Phenotypic Variation with Fitness in a Polymorphic Lizard		A review of the life history of the cownose ray, <i>Rhinoptera bonasus</i> : Is a directed fishery sustainable?	
617	<b>I Macdonald</b>	538	<b>G Dixon-MacCallum</b>	334	S Fordham	2:15 PM
	Burial kinematics of the pacific sandfish: is the two-phase respiratory pump used for rapid burial?		Habitat use by Northwestern Gartersnakes ( <i>Thamnophis ordinoides</i> ) in Victoria, British Columbia		Preventing the Predictable Depletion of U.S. Atlantic Cownose Rays ( <i>Rhinoptera bonasus</i> )	
505	<b>J Bagley</b>	592	<b>C Loughran</b>			2:30 PM
	Phylogeography and Biogeography of the Lower Central American Neotropics: Diversification Between Two Continents, Between Two Seas		Ontogenetic Variation in the Thermal Biology of Northern Pacific Rattlesnakes ( <i>Crotalus oreganus oreganus</i> )			
315	<b>T Pilger</b>	612	<b>M Nafus</b>			2:45 PM
	Intrinsic and Extrinsic Factors Affecting Genetic Diversity and Gene Flow: Comparative Landscape Genetics of Gila River Fishes		Differential Habitat Use by Desert Tortoises ( <i>Gopherus agassizii</i> ) in Relation to Forage Availability			
223	<b>J Eichelberger</b>	666	<b>E Nordberg</b>			3:00 PM
	Single Nucleotide Polymorphisms (SNPs) Provide New Insights into Evolutionary Relationships and History of Hybridization among Scaphirhynchus Sturgeons		Thermal Ecology and Behavioral Activity of Hibernating Timber Rattlesnakes ( <i>Crotalus horridus</i> )			
234	<b>C Paterson</b>	104	<b>J Riley</b>		Discussion	3:15 PM
	The Genetic Diversity and Population Structure of Barred Sand Bass ( <i>Paralabrax nebulifer</i> )		Natural Variation in Incubation Temperatures Influence Locomotor Performance of Snapping Turtle ( <i>Chelydra serpentina</i> ) and Painted Turtle ( <i>Chrysemys picta marginata</i> ) Hatchlings			
587	<b>L Jackson</b>	675	<b>B Hills</b>			3:30 PM
	Primordial Germ Cell Development: An Evolutionary Approach to Genes and Morphology		Where to dig? Modeling Potential Diamondback Terrapin ( <i>Malaclemys terrapin</i> ) Nest Sites at North Inlet, SC, Using a Geographic Information System (GIS)			
280	<b>W Miller</b>	378	<b>D McKnight</b>			3:45 PM
	The Effects of Urbanization on Gene Flow and Genetic Population Structure in a Headwater Salamander, <i>Desmognathus fuscus</i> , Over Multiple Spatial Scales		The Omnivorous Diet of the Western Chicken Turtle ( <i>Deirochelys reticularia miaria</i> )			
	<b>POSTER SESSION I</b>					4:00 PM
	<b>NW Exhibit Hall</b>					4:30 PM
						5:00 PM
						5:30 PM
						6:00 PM

2013 Joint Meeting (JMIH), Albuquerque, NM  
**BREAK-OUT SESSIONS AT A GLANCE**  
**SATURDAY, 13 JULY, Morning Sessions**

ROOM		<i>Brazos</i>		<i>Doña Ana/Cimarron</i>		<i>Galisteo/Aztec</i>
<b>SESSION/ SYMPOSIUM</b>		<b>ASIH Fish Out of Water Symposium</b>		<b>General Ichthyology</b>		<b>SSAR Effects of Energy Development on Herps Symposium</b>
<b>MODERATOR</b>		<b>Tom Turner</b>		<b>Kyle Piller</b>		<b>Jeff Lovich</b>
<b>8:00 AM</b>			744	M Warren		J Lovich/P Nanjappa
				North American Freshwater Fishes Book Project: Update with a Preview of Photographs and Illustrations		Introduction
<b>8:15 AM</b>			78	K Piller	124	J Lovich
				Fish kill in the Pearl River: The good, the bad, and the ugly		Renewable energy development and terrestrial and aquatic wildlife conservation: the new frontier
<b>8:30 AM</b>	88	S Ross	213	G Smith		
		Eco-Evolutionary Change and the Conundrum of Darwinian Debt		Introgression in Catostomin Fishes: Evolutionary Significance and Taxonomic Problems		
<b>8:45 AM</b>	89	C Hoagstrom	357	H Bart	67	D Keinath
		Tertiary Origins of Fish Endemism in North American Highlands: Parallel Evolution, Taxon Cycles, and Human Intrusions		The complicated genetics and taxonomy of western populations of <i>Carpodacus carpio</i> Rafinesque: reflection, resurrection and revelation		Quantifying exposure of wildlife to energy development in the face of rapidly expanding U.S. production
<b>9:00 AM</b>	317	M Douglas	480	T Buser		
		Riverscape Genetics of Mountain Sucker ( <i>Catostomus platyrhynchus</i> ): Endemism Amidst Surprising Biogeographic Patterns		Molecular Systematics of the Oligocottinae (Tidepool Sculpin and its Allies)		
<b>9:15 AM</b>	14	M Pyron	676	D Lumbantobing	580	D Jochimsen
		Regime shift in a large river fish community: body size structure and trophic change		Variation in the Gill Arch of the Subfamily Danioninae (Teleostei; Cyprinidae)		The Impacts of Oil and Gas Development on Herpetofauna, with Particular Attention to Reptiles in Wyoming
<b>9:30 AM</b>	<b>BREAK - NW Exhibit Hall</b>					
<b>SESSION/ SYMPOSIUM</b>		<b>ASIH Fish Out of Water Symposium</b>		<b>General Ichthyology</b>		<b>SSAR Effects of Energy Development on Herps Symposium</b>
<b>MODERATOR</b>		<b>Steve Ross</b>		<b>Casey Dillman</b>		<b>Priya Nanjappa</b>
<b>10:00 AM</b>	282	P Moyle			570	S Spear
		Ecology of non-coevolved fish assemblages in the San Francisco Estuary, California				Modeling Western Rattlesnake habitat use and connectivity to inform the current and potential impacts of energy development
<b>10:15 AM</b>	39	K Gido	161	P Wainwright	97	D Wood
		Ecological and Evolutionary Consequences of Fragmentation of River Networks		Major Patterns of Body Shape Evolution in Acanthomorph Fishes		The potential impact of renewable energy development on regional genetic hotspots in the Mojave and Sonoran Deserts
<b>10:30 AM</b>	58	W Matthews	262	R West	791	W Palen
		Fish in Altered Waters: Species Associations in Oklahoma Streams Before and After the Era of Large Dam-Building		Sexual dimorphism and speciation in three pupfish species (Cyprinodon)		Balancing species conservation and small hydropower development in British Columbia
<b>10:45 AM</b>	42	N Franssen	636	R Oldfield	183	J Guzy
		Reservoirs as a Model System to Assess Contemporary Evolution in Stream Fishes		Evolutionary changes in parental care in North American cichlid fishes		Response of Riparian Reptile Communities to Damming and Urbanization
<b>11:00 AM</b>	339	M Collyer	755	M Sabaj Pérez	793	C Drost
		Examining the association between ecology and morphology in the Pecos pupfish ( <i>Cyprinodon pecosensis</i> ) in an altered and ecologically diverse landscape		An Eschatological Look at the Xingu's Big Bend: Volta Grande		Upstream and downstream effects of Glen Canyon Dam on northern leopard frogs ( <i>Rana pipiens</i> )
<b>11:15 AM</b>	8	M Blum	712	M Craig	242	J Williams
		Ridge-to-Reef Connectivity and Source-Sink Dynamics of Amphidromous Fish Across Oceanic Islands		On the generic and species limits of <i>Polyprion</i> and <i>Stereolepis</i> (Polyprionidae)		Impact of Mountaintop Removal Mines on Terrestrial and Aquatic Salamanders in Southern West Virginia
<b>11:30 AM</b>			574	H Hawk	405	J Klemish
				Age, Growth and Genetic Diversity of Giant Sea Bass, <i>Stereolepis gigas</i>		Amphibian Response to Oil Sands Reclamation and Restoration
<b>11:45 AM</b>		Discussion	585	H Pinheiro		
				Reef fishes of the Vitória-Trindade Seamount Chain, southwestern Atlantic		Discussion
<b>12:00 PM</b>		<b>LUNCH</b>		<b>LUNCH</b>		<b>LUNCH</b>



2013 Joint Meeting (JMIH), Albuquerque, NM  
**BREAK-OUT SESSIONS AT A GLANCE**  
**SATURDAY, 13 JULY, Morning Sessions**

	<i>Ruidoso/Pecos</i>		<i>San Miguel</i>		<i>Mesilla</i>	<i>ROOM</i>
	<b>Amphibian Conservation/ Herp Morphology &amp; Histology</b>		<b>Herp Genetics &amp; Ecology</b>		<b>AES Gruber Award Papers</b>	<b>SESSION/ SYMPOSIUM</b>
	<b>Gordon Rodda</b>		<b>Brad Shaffer</b>		<b>Bob Hueter</b>	<b>MODERATOR</b>
		720	A Shedlock	663	<b>M Bond</b>	<b>8:00 AM</b>
			Mobile DNA in Reptiles and the Evolution of Amniote Genome Structure		Southern stingrays concentrate on shallow flats inside marine reserves: response to top-down or bottom-up processes?	
		690	H Shaffer	231	<b>K Lyons</b>	<b>8:15 AM</b>
			The First Turtle Genome		Quantification of Maternal Offloading of Organic Contaminants in a Histotrophic Elasmobranch the Round Stingray ( <i>Urobatis halleri</i> )	
748	J Gillette	762	R Ward	591	<b>P Clerkin</b>	<b>8:30 AM</b>
	Interspecific Interactions Between an Endemic Fish ( <i>Neochanna burrowsius</i> ) and an Invasive Frog ( <i>Litoria ewingii</i> ): a Benign Invader?		Landscape genetics of Cagle's map turtle ( <i>Graptemys caglei</i> ) in the Guadalupe and San Marcos Rivers of Texas		Reproductive biology and maturity of deep-sea sharks in the Southern Indian Ocean	
555	S Welch	537	B Levine	564	<b>B Prohaska</b>	<b>8:45 AM</b>
	Persistent effects of past land use on <i>Ambystoma cingulatum</i> imperilment		Genetic Structure of the Copperhead ( <i>Viperidae: Agkistrodon contortrix</i> ) at its Most Northern Distribution		Development of a Non-lethal, Minimally Invasive Protocol to Study Elasmobranch Reproduction	
422	J Johnson	777	G Harper	11	<b>R Kempster</b>	<b>9:00 AM</b>
	The Effect of Mesocosm Hydroperiod on the Fitness of F2 Hybrid Tiger Salamanders		Evolution of the Phospholipase A2 venom gene in the five subspecies of copperhead, <i>Agkistrodon contortrix</i>		Survival of the Stillest: Predator Avoidance in Shark Embryos	
18	R Brodman	645	G Mount	83	<b>L Harris</b>	<b>9:15 AM</b>
	The direct effects of aquatic herbicide on Spotted Salamander eggs & larvae		Genomic Resource Development in California Ranids		Electroreception in the obligate freshwater stingray, <i>Potamotrygon motoro</i>	
<b>BREAK - NW Exhibit Hall</b>						<b>9:30 AM</b>
	<b>Amphibian Conservation/ Herp Morphology &amp; Histology</b>		<b>Herp Genetics &amp; Ecology</b>		<b>AES Gruber Award Papers</b>	<b>SESSION/ SYMPOSIUM</b>
	<b>David Cundall</b>		<b>Rocky Ward</b>		<b>Steven Kaijura</b>	<b>MODERATOR</b>
428	D Cundall	595	L Freeborn	481	<b>T Gray</b>	<b>10:00 AM</b>
	The extraordinary nature of the anterior gut in snakes		A Population Genomic Scan of the Highly Polymorphic Strawberry Poison Frog ( <i>Dendrobates pumilio</i> ) Reveals Markers Strongly Associated with Color Pattern		Effective population size and genetic diversity of a species of concern, the sand tiger shark ( <i>Carcharias taurus</i> ) in Delaware Bay, USA	
501	E Freitas	194	N Harings	208	<b>K Atwater</b>	<b>10:15 AM</b>
	Osteological Correlates of Orbit Size in Squamate Reptiles		Desert Anuran Occurrence and Detection in Artificial Breeding Habitats		A mitogenomics view of the genetic status and population history of the basking shark, <i>Cetorhinus maximus</i>	
261	J Daza	96	K McEntire	355	<b>C Testerman</b>	<b>10:30 AM</b>
	Cranial morphology of <i>Aprasia repens</i> , a miniscule burrowing gekkotan		Movement Patterns of the Jollyville Plateau Salamander ( <i>Eurycea tonkawae</i> ) Near Lanier Spring in Bull Creek, Travis Co., Texas		Comparative Patterns of Global Population Genetic Structure in Four Fisheries Exploited Sharks of Conservation Concern	
517	D Green	74	N Bendik	482	<b>M Giresi</b>	<b>10:45 AM</b>
	Sex Ratio in Toads		Photographic Mark-Recapture: Applications and Utility for the Study of an Endangered Aquatic Salamander, <i>Eurycea tonkawae</i>		Morphologically conserved, genetically diverged; A key to distinguish among smoothhound sharks in the U.S. Atlantic	
739	D Provete	594	T McInnes	454	<b>A Carlson</b>	<b>11:00 AM</b>
	Phylogenetic signal and variation of visceral pigmentation in eight anuran families		Thermal Ecology of Western Diamond-backed Rattlesnakes ( <i>Crotalus atrox</i> ): Hibernation, Den Variation and Winter Mortality		Horizontal and Vertical Movement Patterns of Northwestern Atlantic Spiny Dogfish ( <i>Squalus acanthias</i> )	
196	D Adams	706	G Castañeda	412	<b>L Hollensead</b>	<b>11:15 AM</b>
	Rates of morphological evolution in European <i>Hydromantes</i> salamanders		Thermoregulations of <i>Uta stansburiana</i> at the South of its Distribution		Analysis of small scale and daily movement patterns of juvenile <i>Pristis pectinata</i> within a nursery habitat	
16	D Siegel	240	C Brewster	157	<b>A Pickard</b>	<b>11:30 AM</b>
	Notes on male <i>Ambystoma mavortium</i> life history		Quantifying the Cost of Thermoregulation: Thermal and Energetic Constraints on Growth Rates in Hatchling Lizards		Characterization of shark movements on a mesophotic Caribbean coral reef and temporal association with fish spawning aggregations	
		778	I Gherghel	35	<b>A Gallagher</b>	<b>11:45 AM</b>
			Interglaciations as laboratories for new species: using ecological niche models to study incipient evolution in Crested Newts		Relative Vulnerability of Sharks to the US Atlantic Pelagic Longline Fishery	
<b>LUNCH</b>						<b>12:00 PM</b>

2013 Joint Meeting (JMIH), Albuquerque, NM  
**BREAK-OUT SESSIONS AT A GLANCE**  
**SATURDAY, 13 JULY, Afternoon Sessions**

ROOM		<i>Brazos</i>		<i>Doña Ana/Cimarron</i>		<i>Galisteo/Aztec</i>
<b>SESSION/ SYMPOSIUM</b>		<b>ASIH Fish Out of Water Symposium</b>		<b>Euteleost Tree of Life/ Fish Development</b>		<b>SSAR Effects of Energy Development on Herps Symposium</b>
<b>MODERATOR</b>		<b>Keith Gido/Nate Franssen</b>		<b>Richard Broughton</b>		<b>Jeff Lovich</b>
<b>1:30 PM</b>	348	M Power	484	R Broughton	743	C Painter
		Fish, Algae, and Food Webs under "Drought vs Deluge" Hydrologic Regimes in a River with Mediterranean Seasonality		EToL: Phylogenetic Relationships and Divergence Dates of "Basal" Bony Fish Lineages		CCA's and CCAA's - What are they, and are they adequate for use by the Oil/Gas energy companies to provide for the long-term conservation of the Dunes Sagebrush Lizard ( <i>Sceloporus arenicolus</i> ) and other species that may be endangered?
<b>1:45 PM</b>	347	J Trexler	450	R Betancur-R.	232	L Fitzgerald
		Emergent Effects of Disturbance Frequency and Return Time on a Wetland Metacommunity		EToL: The Tree of Life and a New Classification of Bony Fishes		How and why fragmentation from energy development impacts populations of Dunes Sagebrush Lizard ( <i>Sceloporus arenicolus</i> )
<b>2:00 PM</b>	289	G Grossman	629	G Orti	173	S Weir
		Consequences of flow and habitat alterations and fragmentation on stream fish assemblage structure and population dynamics		EToL: molecular markers for fish phylogenetics--past, present, and future		Understanding Risk of H2S Gas Emissions to the Dunes Sagebrush Lizard ( <i>Sceloporus arenicolus</i> ): Using the Western Fence Lizard ( <i>Sceloporus occidentalis</i> ) as a Surrogate Species
<b>2:15 PM</b>	32	J Schaefer	684	J López	722	J Homyack
		Variation in contact zone dynamics between two species of topminnows, <i>Fundulus notatus</i> and <i>F. olivaceus</i> , across isolated drainage systems		EToL: Comparative molecular evolution of protein- coding regions in euteleosts		Effects of Woody Biomass Harvesting and Intercropping Switchgrass in Pine Plantations on Herpetofauna
<b>2:30 PM</b>	326	M Douglas	440	M Sanciangco	69	B Bury
		Use of genetic data to guide management of an historically admixed species complex		ETOL: up in the percomorph tree		Effects of Forest Biomass Removal on North American Herpetofaunas: Can We Have Our Cake and Eat It, Too?
<b>2:45 PM</b>			296	F Zhang		
				EToL: Positive Selection on Mitochondrial OXPHOS Genes in Fishes with Different Swimming Performance		
<b>3:00 PM</b>		Discussion	383	J Harris	792	B Sinervo
				ETOL: The Comparative Anatomy of the Free Pectoral Rays in Scorpaenoid Fishes		The impact of solar farms and wind farms on population persistence and extinction of the desert tortoise, <i>Gopherus agassizii</i>
<b>3:15 PM</b>	236	T Dowling	321	K Dammerman		
		Molecular markers and management of endemic fishes from the mainstream Colorado River: razorback sucker ( <i>Xyrauchen texanus</i> ) as a case study		The effects of fluctuating thermal regimes on larval lake sturgeon development and behavior		
<b>3:30 PM</b>	436	T Turner				
		Comparative Genomics of Fishes in a Drying River: Are Stress and Immune Responses Similar Across Species?				Discussion
<b>3:45 PM</b>	26	C Taylor				
		Long-Term Effects of an Integrated Steelhead Supplementation Program				
<b>4:00 PM</b>		Discussion				
<b>4:15 PM</b>						
<b>4:30 PM</b>						
<b>5:00 PM</b>						
<b>5:30 PM</b>						
<b>6:00 PM</b>				<b>NIA Meeting 6-8 p.m.</b>		<b>SSAR Business Meeting 6 - 8 p.m.</b>

2013 Joint Meeting (JMIH), Albuquerque, NM  
**BREAK-OUT SESSIONS AT A GLANCE**  
**SATURDAY, 13 JULY, Afternoon Sessions**

	<i>Ruidoso/Pecos</i>		<i>San Miguel</i>		<i>Mesilla</i>	<i>ROOM</i>
	<b>Snake Conservation</b>		<b>Herp Systematics &amp; Evolution</b>		<b>AES Gruber Award Papers</b>	<b>SESSION/ SYMPOSIUM</b>
	<b>Phil Cochran</b>		<b>Wolfgang Wüster</b>		<b>Kara Yopak</b>	<b>MODERATOR</b>
728	B Hamilton			366	H Christiansen	1:30 PM
	Short Distance translocation of Great Basin Rattlesnakes: Valid Management Strategy?				Sample preparation techniques for stable isotope analysis of elasmobranch vertebrae	
586	A Puente-Rolón	12	G Koehler	172	A Shaw	1:45 PM
	Translocation as a Management Technique <i>Epicrates inornatus</i> in the Northern Karst Region of Puerto Rico		Divergent Evolution of Genital Morphology, Speciation, and Hybridization in Central American Anoles ( <i>Squamata</i> , <i>Dactyloidae</i> )		Trophic Ecology of an Estuarine Predatory Fish Community in South Carolina Assessed by Stable Isotope Analysis	
550	J Waldron	702	J Davis	123	C Bangley	2:00 PM
	Effects of Translocation on Eastern Diamondback Rattlesnake Spatial Ecology		A Phylogenetic Analysis of the <i>Anolis pentapirion</i> species group		Gastric evacuation, feeding ration, and potential predatory impact of spiny dogfish ( <i>Squalus acanthias</i> ) in the Northwest Atlantic	
44	P Cochran	455	S Poe	477	O Weideli	2:15 PM
	Observations on a Timber Rattlesnake ( <i>Crotalus horridus</i> ) Color Variant in Southeastern Minnesota		Phylogeny of Anolis		How effective is the usage of non-lethal stomach eversion to unveil shark diet alterations induced by anthropogenic habitat destruction?	
577	D Wylie	229	M Morando	246	J Bigman	2:30 PM
	Detection of <i>Chrysosporium</i> Infections in two North American Viper Species		Morphological Evolution In The <i>Liolaemus darwini</i> Species Group ( <i>Squamata</i> : <i>Liolaemini</i> ) Suggests Adaptive Diversification Associated With Climatic Niches		North Pacific spiny dogfish ( <i>Squalus suckleyi</i> ) trophic ecology: using integrated gut content and stable isotope analysis to infer short and long term feeding trends	
212	J Giermakowski	151	S Ruane	68	D Shiffman	2:45 PM
	Consequences of Climate Change for the Arizona Black Rattlesnake ( <i>Crotalus cerberus</i> ), a Southwestern Endemic		Phylogenetics of the Malagasy Pseudoxyrhophiine Radiation		Use of Social Media to Assess the Knowledge and Attitudes of Different Stakeholder Groups Towards Shark Conservation, Including Implications for Public Support for Management Policies	
446	J Bauder	116	W Wüster			3:00 PM
	Using Occupancy Rates of Potential Overwintering Habitat to Monitor Eastern Indigo Snakes ( <i>Drymarchon couperi</i> ) in Southern Georgia		Mitochondrial and nuclear gene sequences and morphological data reveal unexpected diversity in the African forest cobra ( <i>Naja melanoleuca</i> )			
306	A Sacerdote-Velat	49	C Hendry			3:15 PM
	Use of comparative brumation and release approaches for headstarting and recovery of smooth green snakes ( <i>Ophedrys vernalis</i> )		Ecological Divergence and Sexual Selection Drives Sexual Size Dimorphism in New World Pitvipers ( <i>Crotalinae</i> )			
275	J Pierce	710	G Pauly			3:30 PM
	Louisiana Pine Snake ( <i>Pituophis ruthveni</i> ) Population Declines		Phylogenetic Relationships and Species Boundaries among River Cooters, with a Focus on the Federally Endangered Alabama Red-bellied Turtle		<b>AES Business Meeting</b>	
71	D Leavitt					3:45 PM
	Measuring movements of Shovel-nosed Snakes of the genus <i>Chionactis</i> , with a particular emphasis on the Tucson Shovel-nosed Snake ( <i>Chionactis occipitalis klauberi</i> )					
	<b>POSTER SESSION II</b>					4:00 PM
	<b>NW Exhibit Hall</b>					4:30 PM
						5:00 PM
						5:30 PM
						6:00 PM

**2013 Joint Meeting (JMIH), Albuquerque, NM  
BREAK-OUT SESSIONS AT A GLANCE  
SUNDAY, 14 JULY, Morning Sessions**

ROOM		<i>Brazos</i>		<i>Doña Ana/Cimarron</i>		<i>Galisteo/Aztec</i>
SESSION/ SYMPOSIUM		<b>ASIH Fishes &amp; Morphology Symposium I</b>		<b>Fish Biology</b>		<b>Herp Behavior/ Amphibian Conservation</b>
MODERATOR		<b>Bruce Collette</b>		<b>Nancy Brown-Peterson</b>		<b>Stan Fox</b>
8:00 AM			98	L Kéver	761	E Santoyo-Brito
		Introduction		Sound Characteristics and Complex Sonic Apparatus Morphologies in Two Ophidiiformes: <i>Ophidion rochei</i> (Ophidiidae) and <i>Onuxodon fowleri</i> (Carapidae)		Ecology and Parental Care in <i>Liolaemus leopardinus</i> at High Elevations in the Andes of Chile
8:15 AM	558	H Schultze	394	K Boyle	60	M Paulissen
				Electric organ discharge and sound emission in <i>Synodontis</i> spp. catfishes (family Mochokidae): variation of an apomorphic muscle		Environmental cues and learning bias in the Little Brown Skink Lizard, <i>Scincella lateralis</i>
8:30 AM		Bony Fishes, their Morphology and Complex Evolutionary History: State of the Art	769	D Heins	87	B Coupe
				Host Responses to Parasitic Infection in the Threespine Stickleback Fish Infected by the Diphylobothriidean <i>Cestode Schistocephalus solidus</i>		An Individual-based, Spatially-explicit Simulation of Male Sidewinder Rattlesnake ( <i>Crotalus cerastes</i> ) Mate-location Methods
8:45 AM	37	J Maisey	582	J Bautista	784	R Weaver
				Reproductive biology of a severely depressed sport fish, the barred sand bass ( <i>Paralabrax nebulifer</i> ) from Southern California		Ecological Significance of Variation in Body Size in Populations of the Desert Nightsnake ( <i>Hypsiglena chlorophaea</i> )
9:00 AM		New Fossils provide Fresh Ideas about Chondrichthyan and Gnathostome Phylogeny	519	J Crovo	725	B Sullivan
				The Effect of Traffic Noise on the Stress Response in the Blacktail Shiner ( <i>Cyprinella venusta</i> )		Sex Related Variation in Over-wintering Behavior of <i>Gopherus morafkai</i> in Central Arizona
9:15 AM	683	M de Carvalho	756	N Wegner	416	R Vogt
		Morphology and Shark Non-monophyly, or Why Homology Still Matters in Systematics		Evidence for pectoral endothermy in the opah, <i>Lampris guttatus</i>		Postnatal Parental Care in the Giant Amazon River Turtle <i>Podocnemis expansa</i> in Brazil
9:30 AM		<b>BREAK - NW Exhibit Hall</b>				
SESSION/ SYMPOSIUM		<b>ASIH Fishes &amp; Morphology Symposium I</b>		<b>Fish Systematics &amp; Biogeography</b>		<b>Herp Behavior/ Amphibian Conservation</b>
MODERATOR		<b>Amy McCune</b>		<b>Brian Sidlauskas</b>		<b>Kerry Giffis-Kyle</b>
10:00 AM	402	P Konstantinidis	571	M Davis	758	S Fox
		The Early Development of the Cranial Musculature of the Longnose Gar		The Evolution and Invasion of Marine Fishes into Deep-Sea Environments		Using Remote Query of PIT-tagged <i>Trachemys scripta</i> to Determine Trapping Dynamics via Conventional Hoop Traps
10:15 AM	122	J Webb	427	T Near	156	R Lehtinen
				Phylogeny and tempo of diversification in the superradiation of acanthomorph fishes		Impacts of Paternal Care on Offspring Survival: An Experimental Study on a Glass Frog from Tobago, West Indies
10:30 AM		The Mechanosensory Lateral Line System of Fishes: What We Still Don't Know After 150+ Years	515	R Eytan	783	D Reavill
				A Phylogenomic Approach to Inferring Acanthomorph Interrelationships		Odor Discrimination in the Coastal Giant Salamander ( <i>Dicamptodon tenebrosus</i> )
10:45 AM	79	A McCune	7	S Martin	329	K Lovich
				New Story from an Old Refugium: Phylogeography of <i>Chrosomus erythrogaster</i>		An Historical Look at Reptile and Amphibian Confiscations at the San Diego Zoo - Collaborative Efforts Between Agencies and Zoos for Species Conservation
11:00 AM		Homology and transformation of lungs and gas bladders: evidence from morphology at multiple levels	235	D Carnak	322	T Cotten
				Adding fuel to the fire: A phylogeographic assessment of diversity within the firemouth cichlids ( <i>Thorichthys</i> : Cichlidae)		Lowland Leopard Frog Distribution and Habitat Use along the Greater Lower Colorado River Ecosystem
11:15 AM	431	P Witten	337	B Sidlauskas	314	T Jones
				Morphometrics, meristics, microsatellites and molecular phylogenetics clarify divergence and taxonomic status of Speckled Daces ( <i>Rhinichthys osculus</i> ) throughout Oregon's Great Basin		Invasive Bullfrog Removal in the American Southwest: A Case Study from the Pajarito/Atascosa Mountains, Arizona
11:30 AM		Mechanisms of teleost skeletal plasticity: modulation, adaptation, remodelling and repair	141	G Seegert	56	K Giffis-Kyle
				Revisiting the Wabash River Fish Community 20 years after a Power Plant's Retirement		Ecological Traps for Amphibians in Sonoran Desert Constructed Wildlife Waters
11:45 AM					738	C Ofori-Boateng
						Innovative Conservation Awareness Program Increases Stakeholder Participation and Protection for a Critically Endangered Frog In West Africa
12:00 PM		<b>LUNCH</b>		<b>LUNCH</b>		<b>LUNCH</b>

**2013 Joint Meeting (JMIH), Albuquerque, NM  
BREAK-OUT SESSIONS AT A GLANCE  
SUNDAY, 14 JULY, Morning Sessions**

	<b>Ruidoso/Pecos</b>		<b>San Miguel</b>		<b>Mesilla</b>	<b>ROOM</b>
	<b>Herp Conservation</b>		<b>AES Conservation</b>		<b>AES Reproduction</b>	<b>SESSION/ SYMPOSIUM</b>
	<b>Leslie Ruyle</b>		<b>Nick Whitney</b>		<b>Jim Gelsleichter</b>	<b>MODERATOR</b>
243	L Ruyle	238	A Nosal	381	J Gelsleichter	<b>8:00 AM</b>
	Population Ecology of the Micro-endemic Iguana <i>Ctenosaura melanosterna</i>		Happy and Playful Sharks? The Effect of Background Music in Nature Documentaries on Viewers' Perception of and Willingness to Protect Sharks		Androgen production and function in male elasmobranch reproduction	
641	A Grimsley	335	J Stewart	108	B Anderson	<b>8:15 AM</b>
	Correlation of Habitat Factors on the Presence or Absence of Eastern Collared Lizards ( <i>Crotaphytus collaris collaris</i> ) in Arkansas		Conservation implications of oceanic manta ray spatial ecology based on stable isotope analysis and satellite tagging		Non-lethal Characterization of the Reproductive Cycle of the Blacknose Shark ( <i>Carcharhinus acronotus</i> ) Using Circulating Levels of Gonadal Steroid Hormones	
528	M Parker	432	N Whitney	285	K James	<b>8:30 AM</b>
	Effects of Translocation on Flat-tailed Horned Lizards ( <i>Phrynosoma mcallii</i> ) in Southwestern Arizona		Hook, line, and sinker? Using accelerometers to assess post-release behavior in sharks		Reproductive biology of a central California skate assemblage	
494	K Floyd	524	J Stein	406	C Gburski	<b>8:45 AM</b>
	Comparison of road impacts on the population genetic structure of two syntopic lizards in southern New Mexico		A Fisheries Independent Study Documenting 30-Year Trends in Shark Diversity and Abundance in the Eastern Exuma Sound, The Bahamas		The Spiny Issue of Ageing Spiny Dogfish: Historical Dogma vs. New Methods	
490	C Siler	393	J Spaet	621	J Sulikowski	<b>9:00 AM</b>
	Conservation genetics of Australasian Sailfin Lizards and evaluation of the illegal pet trade in the Philippines		Long-term Market Survey of Saudi Arabian Red Sea Shark Fisheries		Observations of the Reproductive Biology of Spiny Dogfish, <i>Squalus acanthias</i> , along the United States East Coast: is this species more resilient than once thought?	
338	R Lovich	660	C Neff	127	C Chabot	<b>9:15 AM</b>
	The Flat-tailed Horned Lizard ( <i>Phrynosoma mcallii</i> ) Monitoring and Management Strategy		The role of science in improving shark bite terminology		A comparison of the frequency of multiple paternity between two populations of the brown smoothhound shark, <i>Mustelus henlei</i>	
<b>BREAK - NW Exhibit Hall</b>						<b>9:30 AM</b>
	<b>Herp Conservation</b>		<b>AES Behavior</b>		<b>AES Morphology &amp; Physiology</b>	<b>SESSION/ SYMPOSIUM</b>
	<b>Jackie Litzgus</b>		<b>Steve Kessel</b>		<b>Carl Luer</b>	<b>MODERATOR</b>
91	T Campbell	542	S Kessel	165	C Luer	<b>10:00 AM</b>
	Synergistic Effects and Management of Two Invasive Carnivorous Lizards in Florida		Shallow water scavenging on marine mammals observed in a deep-water Arctic predator species, the Greenland shark ( <i>Somniosus microcephalus</i> )		Experimental Wounding and Preliminary Characterization of the Healing Response in the Atlantic Stingray, <i>Dasyatis sabina</i>	
47	L Jones	264	A Kroetz	392	K Yopak	<b>10:15 AM</b>
	Inter-year Variation in Lizard Assemblage Dynamics at an Ecotone in Southeastern Arizona		Eating Between the Lines: Bonnetheads ( <i>Sphyrna tiburo</i> ) Show a Non-Traditional Functional Feeding Response		Are Sharks "Smart"? Developing Quantitative Measures of Cognitive Ability in Fishes	
669	J Richmond	545	J Finger	711	S Kajjura	<b>10:30 AM</b>
	When lizards, fracking, and solar panels collide: landscape genetics of the endangered blunt-nosed leopard lizard <i>Gambelia sila</i> in California's San Joaquin Valley		Investigating personality in juvenile lemon sharks ( <i>Negaprion brevirostris</i> )		Novel Olfactory System Neural Organization Revealed by Diffusion Tensor MRM	
135	J Litzgus	373	T Guttridge	757	M Belleggia	<b>10:45 AM</b>
	Long-term Study Reveals Decline in a Spotted Turtle ( <i>Clemmys guttata</i> ) Population in a Relatively Pristine Environment		Novel Acoustic Technology for Studying the Social Behaviour of Free-Ranging Sharks by Recording Individual Interactions		Dentition and Tooth Replacement Rate of the Narrownose Smoothhound Shark <i>Mustelus schmitti</i>	
55	W Anthonsamy	222	R Honebrink	547	J Mandelman	<b>11:00 AM</b>
	Habitat Partitioning in a Midwest Turtle Assemblage		Occurrence of White Sharks ( <i>Carcharodon carcharias</i> ) in Hawaiian Waters		To chill or not to chill: does on-hook behavior modulate the physiological status of longline-caught sharks	
674	B Kingsbury	217	P Klimley	607	K Goldman	<b>11:15 AM</b>
	Advances in Predicting Spring Emergence of the Eastern Box Turtle ( <i>Terrapene carolina</i> )		Movements and residency of sevengill sharks ( <i>Notorynchus cepedianus</i> ) in San Francisco Bay		An update on the thermal physiology and reproductive biology of salmon sharks, <i>Lamna ditropis</i>	
491	S Kimble	359	J Vaudo	398	A Leary	<b>11:30 AM</b>
	Landscape genetics in the forest-dwelling eastern box turtle <i>Terrapene c. carolina</i> across a landscape heavily fragmented by agriculture		Movements of mako sharks ( <i>Isurus oxyrinchus</i> ) tagged in the western North Atlantic Ocean		Polycyclic Aromatic Hydrocarbon Biomarker Exposure in Elasmobranchs after the Deepwater Horizon Oil Spill: Investigations on the Smooth Dogfish, <i>Mustelus canis</i>	
325	H Hoffman	759	R Hueter	466	J Imhoff	<b>11:45 AM</b>
	Sonoran Desert Tortoise ( <i>Gopherus morafkai</i> ) Activity Patterns In and Around Desert Washes and Potential Effects of Off-Road Traffic on Tortoise Movement on the Barry M. Goldwater Range East		Horizontal and Vertical Movements of a Satellite-tagged Longfin Mako ( <i>Isurus paucus</i> Guitart-Manday, 1966) in the Northwestern Atlantic Ocean		Mercury Contamination in Sandbar Shark Muscle: A Thirty Year Comparison	
<b>LUNCH</b>						<b>12:00 PM</b>

2013 Joint Meeting (JMIH), Albuquerque, NM  
**BREAK-OUT SESSIONS AT A GLANCE**  
**SUNDAY, 14 JULY, Afternoon Sessions**

ROOM		<i>Brazos</i>		<i>Doña Ana/Cimarron</i>		<i>Galisteo/Aztec</i>	
<b>SESSION/ SYMPOSIUM</b>		<b>ASIH Fishes &amp; Morphology Symposium I</b>		<b>Fish Ecology</b>		<b>Herp Ecology I</b>	
<b>MODERATOR</b>		<b>Kevin Conway</b>		<b>Hank Bart</b>		<b>James Watling</b>	
<b>1:30 PM</b>	698	G Johnson	472	D Holt			
		Morphology and Evolutionary History of Teleosts: Progress and Prospects		Soundscapes of <i>Cyprinella venusta</i> : Describing the Natural and Unnatural in Small Freshwater Streams			
<b>1:45 PM</b>			396	M Pereira	38	J Deitloff	
					Nutrient recycling and stoichiometry of two grazing fishes: Are native and non-native species ecologically redundant?		Head morphology and food use in two species of cryptic and co-occurring Plethodon salamanders
<b>2:00 PM</b>				424	B Frenette	727	S Mullin
				Effects of Predation Pressure on Survival and Recruitment of Red Shiners		Trophic niche breadth in a widely-foraging snake (Colubridae: Coluber)	
<b>2:15 PM</b>	216	C Baldwin	423	A Best	611	J Rivas	
		The Phylogenetic Significance of Color Patterns in Marine Teleost Larvae		Trends in fish assemblage structure following the invasion of a nonindigenous cyprinid		Bottom-up factors affecting pregnancy rate of green anacondas ( <i>Eunectes murinus</i> ): trophic level interactions in a hyperseasonal tropical system	
<b>2:30 PM</b>	27	N Bertrand	270	J Curtis	293	T Farrell	
		Fish Dentistry: Distribution and Evolution of Heterodonty in Extant Ray-Finned Fishes (Actinopterygii)		Hiding in Plain Sight: Tracking the Red Snapper Spawning Stock in the Western Gulf of Mexico		The Ecology of a Rattlesnake ( <i>Sistrurus miliarius</i> ): Integrating Information from Museum Specimens with a Field Study	
<b>2:45 PM</b>	316	K Bemis	239	F Qiu	760	O Cano	
		Tooth Development, Attachment, and Replacement in Atlantic Wolffish, <i>Anarhichas lupus</i>		Scombroid Fishes Provide Novel Insights into the Trait/Rate Associations of Molecular Evolution		Bullfrog ( <i>Lithobates catesbeiana</i> ) as an exotic predator in State Park Cañón de Fernández Durango, México	
<b>3:00 PM</b>	691	K Conway	420	K Alofs	724	J Hoverman	
		Heterodonty in the New World Clingfishes (Teleostei: Gobiessocidae)		Range shifts and their impacts on Ontario Freshwater Fish Communities		On the making of a superspreader: Experimental assessment of the factors driving parasite aggregation and infection heterogeneity	
<b>3:15 PM</b>	105	J Lundberg	506	W Tonn	224	R Warne	
		A First Phylogenetic Reading of the Skin and Bones of another Enigmatic Catfish: <i>Kryptoglanis shajii</i> Vincent & Thomas, 2011 ( <i>Siluriformes, incertae sedis</i> )		Resource Polymorphism in Lake Trout: the Coexistence of Multiple Shallow-Water Morphotypes in Great Bear Lake, Canada		Stress effects on susceptibility and transmission of <i>Ranaviruses</i> in amphibians	
<b>3:30 PM</b>	21	C DoNascimento	599	C Olaya-Nieto	46	I Murray	
		Systematics and Phylogenetic Relationships of the Subfamily of Parasitic Catfishes <i>Stegophilinae</i> ( <i>Siluriformes, Trichomycteridae</i> )		Trophic ecology of <i>Pacora</i> ( <i>Plagioscion magdalenae</i> ) in the Ciénaga de Ayapel, San Jorge river system		Physiological Ecology of the Husab Sand Lizard, <i>Pedioplanis husabensis</i> , a Namib Desert Endemic	
<b>3:45 PM</b>	51	N Salcedo					
		Plates missing, bones teasing: external morphology, osteology, and the interrelationships of the genus <i>Chaetostoma</i> ( <i>Siluriformes: Loricariidae</i> )					
<b>4:00 PM</b>		<b>POSTER SESSION III</b> <b>NW Exhibit Hall</b>					
<b>4:30 PM</b>							
<b>5:00 PM</b>							
<b>5:30 PM</b>							
<b>6:00 PM</b>							

2013 Joint Meeting (JMIH), Albuquerque, NM  
**BREAK-OUT SESSIONS AT A GLANCE**  
**SUNDAY, 14 JULY, Afternoon Sessions**

	<i>Ruidoso/Pecos</i>		<i>San Miguel</i>		<i>Mesilla</i>	<b>ROOM</b>
	<b>Herp Development &amp; Reproduction</b>		<b>Fish Conservation</b>		<b>AES Systematics &amp; Genetics</b>	<b>SESSION/ SYMPOSIUM</b>
	<b>Nicole Valenzuela</b>		<b>Mia Adreani</b>		<b>Demian Chapman</b>	<b>MODERATOR</b>
745	R Diaz	620	D Fernando	444	T Daly-Engel	<b>1:30 PM</b>
	Playing footsies with Evolution: Development of the arboreally specialized Chameleon hands/feet		Mobulid Fisheries of South India as an Example of a Problematic Activity		Aloha Dogfish: Description of a New Shark Species from Hawaii	
272	J Lin	779	M Adreani	377	D Chapman	<b>1:45 PM</b>
	Survival cost of reproduction in the green spotted grass lizard <i>Takydromus viridipunctatus</i> : interplay among testosterone, immunity and parasitism		Estimating fecundity, spawning frequency and growth rates of temperate reef fish; a comparison of natural and artificial rocky reefs		Twenty-year pedigree yields first evidence of geographically precise natal philopatry in sharks	
59	K Kaiser	86	L Williams	529	A Bernard	<b>2:00 PM</b>
	Effects of Anthropogenic Noise on Endocrine, Immune, and Reproductive Measures in White's Treefrog		The Use of Ultrasonic Telemetry to Evaluate Red Snapper, <i>Lutjanus campechanus</i> , Fishing Mortality in the Northern Gulf of Mexico		The evolutionary history of a coastal-pelagic species: the global phylogeography of the tiger shark ( <i>Galeocerdo cuvier</i> )	
648	J Agugliaro	33	T Darden	774	D Kacev	<b>2:15 PM</b>
	Temperature-dependent Metabolic Rate Depression in Timber Rattlesnakes ( <i>Crotalus horridus</i> ) during Artificial Hibernation		Effects of Overexploitation on the Genetic Diversity of Atlantic Red Snapper ( <i>Lutjanus campechanus</i> )		Using genetics to better understand management of a data-poor, highly migratory predator	
64	J Van Dyke	788	M Albins	768	A Barker	<b>2:30 PM</b>
	Conditions Favoring the Evolution of Placental Provisioning in a Viviparous Skink: Hungry Moms and Infanticidal Cannibalism.		Age-1 Red Snapper ( <i>Lutjanus campechanus</i> ) Exclude Age-0 Red Snapper From High-Quality Recruitment Habitat		Genetic Structure of Leopard Shark Populations along the Pacific Coast of North America	
643	W Booth	787	N Mercado-Silva	770	D Portnoy	<b>2:45 PM</b>
	The Emerging Phylogenetic Pattern of Parthenogenesis in Snakes		Comparing Standard North American Freshwater Fish Data Using a Simple Online Tool: <a href="http://fisheriesstandardsampling.org">fisheriesstandardsampling.org</a>		Genetic Population Structure of the Finetooth Shark ( <i>Carcharhinus isodon</i> ) in the U.S. Atlantic	
371	A Cree	718	K Cole	113	J Wyfels	<b>3:00 PM</b>
	Has reproductive frequency increased over the past 20 years in a viviparous, cool-climate gecko?		The sustainability myth: making management and conservation decisions in a reproductive biology information vacuum		The Skate Genome Project	
252	N Valenzuela	385	M O'Neill			<b>3:15 PM</b>
	How The Turtle Gets Its Sex: Comparative Transcriptomics of TSD and GSD Turtle Embryos During Sexual Development		Training Hatchery-raised Bonetail to Recognize Predators			
		418	H Brandenburg			<b>3:30 PM</b>
			Early life history of native catostomids, and inference of their spawning periodicity, in the San Juan River (2003-2011)			
		518	S Sánchez-Banda			<b>3:45 PM</b>
			Evaluation of the Growth Basic Parameters of Blanquillo ( <i>Sorubim cuspicaudus</i> ) for Several Annual Cycles in the Sinu River, Colombia			
	<b>POSTER SESSION III</b>					<b>4:00 PM</b>
	<b>NW Exhibit Hall</b>					<b>4:30 PM</b>
						<b>5:00 PM</b>
						<b>5:30 PM</b>
	<b>ASIH Business Meeting</b>					
	<b>6 - 8 p.m.</b>					<b>6:00 PM</b>





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**BREAK-OUT SESSIONS AT A GLANCE**  
**Monday, 15 JULY, Morning Sessions**

	<i>Ruidoso/Pecos</i>		<i>San Miguel</i>		<i>Mesilla</i>	<i>ROOM</i>
	<b>Herp Biogeography</b>		<b>No Session Scheduled</b>		<b>No Session Scheduled</b>	<b>SESSION/ SYMPOSIUM</b>
	<b>Rafe Brown</b>					<b>MODERATOR</b>
						<b>8:00 AM</b>
						<b>8:15 AM</b>
						<b>8:30 AM</b>
780	D Leavitt					<b>8:45 AM</b>
	Species boundaries and phylogenetic relationships of the <i>Xantusia vigilis</i> species group					
310	W Ryberg					<b>9:00 AM</b>
	Using landscape ecotones to identify biogeographic sets of lizards in the Mescalero Sands					
523	S Kuchta					<b>9:15 AM</b>
	Systematics and Biogeography of the Cumberland Plateau Salamander, <i>Plethodon kentucki</i>					
<b>BREAK - Ground Level West Atrium</b>						
	<b>Herp Biogeography</b>		<b>General Herpetology</b>		<b>Reptile Ecology</b>	<b>SESSION/ SYMPOSIUM</b>
	<b>Shawn Kuchta</b>		<b>Brian Crother</b>		<b>David Germano</b>	<b>MODERATOR</b>
530	S Rovito	345	A Bauer	175	D Germano	<b>10:00 AM</b>
	Patterns of climatic niche divergence across a latitudinal gradient in Neotropical salamanders		The Oldest Herpetological Collection in the World: The Surviving Amphibian and Reptile Specimens of the Museum of Ulisse Aldrovandi		Growth, Population Structure, Reproduction, and Survivorship of the Western Pond Turtle at a High Elevation Pond in Southern California	
346	J Phillips	207	N Scott	407	M Keevil	<b>10:15 AM</b>
	Phylogeography and conservation genetics of the Grotto Salamander, <i>Eurycea spelaea</i>		Annotated Taxonomic and Distributional Checklist of the Reptiles of Paraguay		The Effects of Habitat Productivity and Population Density on Juvenile Growth Rates of Painted Turtles, <i>Chrysemys picta</i>	
572	R Bonett	474	J Watling	549	J Bardwell	<b>10:30 AM</b>
	Biogeography and body size shuffling of aquatic salamander communities on a shifting refuge		Interspecific Variation in Desiccation Resistance Explains Amphibian Distributions on Forest Islands in Bolivia		Basking turtle assemblage demographics within a central Texas creek community	
203	C Guarnizo	185	B Crother	516	P Andreadis	<b>10:45 AM</b>
	The role of orogeny and paleoclimate change in driving allopatry in the Colombian Andes frog <i>Rheobates palmatus</i>		Revisiting Incongruences in Squamate Phylogenetics		Neonate demography of Burmese Pythons in southern Florida, USA	
682	R Brown	349	M White	658	C Montgomery	<b>11:00 AM</b>
	Spotted stream frog diversification at the Australasian faunal zone interface, mainland versus island comparisons, and a test of the Philippine dual umbilicus hypothesis		Oct-4 and the Induced Mechanism of Germ Cell Determination in Reptiles		Body Size, Growth, and Sexual Size Dimorphism in <i>Boa constrictor imperator</i> from Cayos Cochinos, Honduras	
541	M Davis	624	M Donnelly	227	R Warne	<b>11:15 AM</b>
	A Rattlesnake on the Brink: Global Change and its Impacts on Short-Range Biodiversity Endemics		Jay M. Savage: His Contributions to Herpetology and the ASIH		Ecological variation and resource allocation to life history processes in lizards	
773	G Wogan			640	C Agard	<b>11:30 AM</b>
	Disassembly and Nestedness of Sundaland Amphibian and Reptile Communities				The Impact of Caudal of Autotomy on Growth in <i>Sceloporus jarrovi</i> (Phrynosomatidae)	
				785	L Welton	<b>11:45 AM</b>
					Phylo-forensics of Philippine monitor lizards: an analysis of trade in the genus <i>Varanus</i>	
<b>LUNCH</b>						
						<b>12:00 PM</b>

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**BREAK-OUT SESSIONS AT A GLANCE**  
**Monday, 15 JULY, Afternoon Sessions**

ROOM		<i>Brazos</i>		<i>Doña Ana/Cimarron</i>		<i>Galisteo/Aztec</i>
SESSION/ SYMPOSIUM		<b>ASIH Fishes &amp; Morphology Symposium II</b>		<b>No Session Scheduled</b>		<b>Fish Behavior</b>
MODERATOR		<b>Gloria Arratia</b>				<b>Karen Martin</b>
1:30 PM	697	C Kenaley			255	B Erisman
		Morphology as an integrative discipline: a functional focus on endless forms so beautiful				Phylogenetic Perspectives on the Evolution of Hermaphroditism in Teleost Fishes
1:45 PM					182	T Donaldson
		The Posttemporal-supracleithrum Articulation: An Untapped Resource for Morphology-based Phylogenetic Investigations of Euteleosts				The Diversity and Mating of Wrasses in a Spawning Aggregation Site Influenced by Fish Feeding
2:00 PM	43		N Holcroft			169
		The Posttemporal-supracleithrum Articulation: An Untapped Resource for Morphology-based Phylogenetic Investigations of Euteleosts				Behavior and long-term movement patterns of goliath grouper after catch and release
2:15 PM	137		E Wiley			211
		A Polyural Interpretation of the Caudal fins of Danio rerio and Gasterosteus aculeatus: Homology and Discovery of Synapomorphies				Behavioral Response of Select Reef Fishes to Pile Driving
2:30 PM						323
		The untold story of the caudal skeleton in the electric eel: taxonomic, phylogenetic and functional implications (Ostariophys: Gymnotiformes: Electrophorus)				Movement behavior and habitat selection of white croaker (Genyonemus lineatus) in the Los Angeles and Long Beach Harbors
2:45 PM	132		C de Santana			548
		The untold story of the caudal skeleton in the electric eel: taxonomic, phylogenetic and functional implications (Ostariophys: Gymnotiformes: Electrophorus)				Bright Coloration in Juvenile Damselfishes Reduces Aggression from Territorial Adults
3:00 PM						
<b>BREAK- Ground Level West Atrium</b>						
SESSION/ SYMPOSIUM		<b>ASIH Fishes &amp; Morphology Symposium II</b>		<b>No Session Scheduled</b>		<b>Fish Behavior</b>
MODERATOR		<b>G. David Johnson</b>				<b>Karen Martin</b>
3:30 PM	90	G Arratia			340	K Martin
		Teleostean Morphology in a Temporal Dimension: Reflections on the Evolution of Selected Characters				Educational documentary, "Surf, Sand, and Silversides: The California Grunion"
3:45 PM						
		Discussion				
4:00 PM						
4:15 PM						
4:30 PM						
4:45 PM						
5:00 PM						

2013 Joint Meeting (JMIH), Albuquerque, NM  
**BREAK-OUT SESSIONS AT A GLANCE**  
**Monday, 15 JULY, Afternoon Sessions**

	<i>Ruidoso/Pecos</i>		<i>San Miguel</i>		<i>Mesilla</i>	<i>ROOM</i>
	No Session Scheduled		No Session Scheduled		No Session Scheduled	SESSION/ SYMPOSIUM
						MODERATOR
						1:30 PM
						1:45 PM
						2:00 PM
						2:15 PM
						2:30 PM
						2:45 PM
<b>BREAK - Ground Level West Atrium</b>						3:00 PM
	No Session Scheduled		No Session Scheduled		No Session Scheduled	SESSION/ SYMPOSIUM
						MODERATOR
						3:30 PM
						3:45 PM
						4:00 PM
						4:15 PM
						4:30 PM
						4:45 PM
						5:00 PM

**2013 Joint Meeting of Ichthyologists and Herpetologists, Albuquerque, NM**  
**POSTER SESSIONS AT A GLANCE**  
**FRIDAY, 12 JULY, Poster Session I**

POSTER #		PRESENTER(S)	POSTER TITLE
1	397	A Shaw - C	Stable isotope analysis reveals resource partitioning in the cownose ray, <i>Rhinoptera bonasus</i>
2	112	J Perez	The Reproductive Cycle of the Cownose Ray <i>Rhinoptera bonasus</i> in Southern Gulf of Mexico: it Can be Biennial?
3	786	R Fisher	Reproductive Anomalies in Cownose Rays ( <i>Rhinoptera bonasus</i> ) from Chesapeake Bay
4	413	C Gburski	Preliminary Results on the age validation of big skate ( <i>Beringraja binoculata</i> ) and longnose skate ( <i>Raja rhina</i> ) using bomb-derived radiocarbon
5	247	K Hara	Age, growth, and size at sexual maturity of Kwangtung skate <i>Dipturus kwangtungensis</i> in the East China Sea
6	478	M Gonzalez De Acevedo	Preliminary Characterization of reproduction in bonnethead sharks ( <i>Sphyrna tiburo</i> ) from the southeastern U.S. Atlantic coast
7	429	A Brown	Preliminary findings on the reproductive biology of the finetooth shark, <i>Carcharhinus isodon</i> , in Atlantic waters of the Southeastern United States
8	380	J Bigman - C	Monterey Bay food web: Insights from stable isotope analysis
9	22	D Gonzalez-Jurado	Seasonal, Geographic, and Ontogenetic Feeding Ecology of Eastern Pacific Angel Sharks
10	751	L Carter	Elasmobranch Sensory Stimulation as a Bycatch Reduction Technique in Commercial Fisheries
11	604	A Adelson	Changing abundances of white sharks ( <i>Carcharodon carcharias</i> ) in the Mediterranean Sea
12	583	M McCallister	Developing a Sighting Database to document the Presence of white sharks ( <i>Carcharodon carcharias</i> ) off the Southeastern United States
13	358	H Christiansen - C	The last frontier: catch records of white sharks ( <i>Carcharodon carcharias</i> ) in the Northwest Pacific Ocean
14	448	R Bullock	'A Day in the Life of a Shark' Understanding the Fine-scale Behaviour of Free-ranging Juvenile and Sub-adult Lemon Sharks ( <i>Negaprion brevirostris</i> ), Using Novel Accelerometer Technology
15	445	L Brewster	The influence of temperature on activity level and behavior for a juvenile elasmobranch species
16	263	J Davis	Movement and Behavior of the New Zealand Eagle Ray, <i>Myliobatis tenuicaudatus</i>
17	300	J Knuckey	Phylogenetic Relationships of Eastern North Pacific Soft-Nosed Skates ( <i>Arhynchobatidae</i> : <i>Bathyraja</i> )
18	367	M Pfleger - C	Dogfish Shark Speciation in the Gulf of Mexico
19	479	T Gray - C	Global population structure of the dusky shark and geographic sourcing of shark fins from commercial markets - Updated results
20	128	C Chabot	Population connectivity of the brown smoothhound shark, <i>Mustelus henlei</i> , in the northeastern Pacific and the Gulf of California
21	627	M Morales	Population genetic structure of the bigeye thresher shark, <i>Alopias superciliosus</i> , using mitochondrial DNA control region, in a comparison between the Atlantic and Indian Oceans
22	654	M Balk	Paleoecology of <i>Carcharocles megalodon</i> , the Megatooth Shark
23	600	U Kawai - CM	Diet of <i>Hemidactylus frenatus</i> introduced in Ankarafantsika National Park, Madagascar
24	154	J Baxter-Gilbert - CM	Merging Aboriginal Traditional Knowledge (ATK) with Contemporary Road Ecology to Develop Successful Highway Mitigation for At-Risk Reptiles
25	715	I Gherghel - CM	Impact of Global Climate Change on Low-Dispersal Organisms: Refining Ecological Niche Models Using GIS Tools
26	646	J Ferington - CM	Effects of low-dose, short-term exposure to the Herbicide "Roundup" on long-term survival of the African clawed frog, <i>Xenopus laevis</i>
27	626	D Iuliucci - CM	Amphibian Productivity in a Restored Wetland Landscape in Maryland, USA
28	181	D Ward - CM	The effect of roads on the movement of the Northern Pine Snake
29	561	I Gross - CM	Patterns of Snake ( <i>Colubridae</i> : <i>Storeria</i> ) Movement and Mortality during Seasonal Migrations Between Habitats
30	304	K O'Donnell - CM	Initial Terrestrial Salamander Responses to Prescribed Fire and Timber Harvest in Southeast Missouri
31	569	C Howey - CM	The Effects of Prescribed Burning on the Landscape and Reptile Abundance
32	414	J McQuigg - CM	A Reassessment of the Conservation Status of a Critically Endangered Neotropical Frog, <i>Mannophryne olmonae</i> , Using Occupancy Modeling Techniques
33	57	M Oliva - CM	Anthropogenic Noise Affects Calling Behavior in a Bromeliad-Dwelling Treefrog
34	408	M Keevil - PM	Assessing Bias in a Common Method for Estimating Asymptotic Size in Turtles and Evaluation of an Alternative Strategy
35	467	M Beal - PM	Cool Runnings: Linking Body Temperature, Performance, and the Ecology of <i>Sceloporus jarrovi</i>
36	692	D Linden - ESG	Estimation of phylogeny of the <i>Anolis cupreus</i> ( <i>Squamata</i> : <i>Dactyloidae</i> ) species group
37	578	J Stewart - ESG	Lineage Delimitation of Dekay's Brownsnake ( <i>Storeria dekayi</i> ) using Ecological Niche Modeling
38	610	A King - ESG	Colonization and Differentiation in the Honduran Bay Islands Populations of <i>Anolis allisoni</i>
39	370	P Cullimore - ESG	Comparative phylogenetics of an isolated population of Northern Dusky salamanders ( <i>Desmognathus fuscus</i> )
40	453	P Gonzalez - ESG	Common mechanisms of diversification in co-distributed island archipelago tree frogs?
41	268	S Yu - ESG	Endosulfan and Alpha-cypermethrin Inhibit Repair of DNA Photo Adducts and Decrease Transcription of Nucleotide Excision Repair Genes in <i>Xenopus laevis</i> Embryos
42	152	M Maltbie - ENHD	Microhabitat Use in Sidewinder Rattlesnakes ( <i>Crotalus cerastes</i> ) on the Kelso Dunes

C = AES Carrier

CM = SSAR Conservation & Management

PM = SSAR Physiology & Morphology

ESG = SSAR Evolution, Systematics & Genetics

ENHD = SSAR Ecology, Natural History & Distribution

**2013 Joint Meeting of Ichthyologists and Herpetologists, Albuquerque, NM**  
**POSTER SESSIONS AT A GLANCE**  
**FRIDAY, 12 JULY, Poster Session I**

POSTER #		PRESENTER(S)	POSTER TITLE
43	703	A Hoekstra - ENHD	Effect of Habitat Fragmentation on the Body Temperatures of Timber Rattlesnakes
44	539	E Norberg - ENHD	Large Ranging Snakes in a Small Nature Preserve: The Seasonal Movement Patterns of Timber Rattlesnakes ( <i>Crotalus horridus</i> ) in Middle Tennessee
45	389	C Loughran - ENHD	Chemical Cues Allow for Recognition of Conspecifics by Neonate Northern Pacific Rattlesnakes ( <i>Crotalus oreganus oreganus</i> )
46	102	J Riley - ENHD	Predation of Snapping Turtle ( <i>Chelydra serpentina</i> ) and Painted Turtle ( <i>Chrysemys picta marginata</i> ) Nests is not restricted to Early Incubation
47	126	M Thomas - ENHD	Measuring Niche Overlap in a Community of Invertebrate Eating Snakes
48	320	T O'Brien - ENHD	Impacts of Microclimate on Neonatal Growth Trajectories in Grassland Snakes
49	707	I Emmons - ENHD	Northern Mexican Gartersnake Habitat Selection and Spatial Ecology in north-central Arizona
50	729	J Vanek - ENHD	Spatial Ecology of Eastern Hognose Snakes at the Northeastern Extent of their Range
51	158	P Moldowan - ENHD	Sexual dimorphism and alternative mating strategies in the Midland Painted Turtle ( <i>Chrysemys picta marginata</i> )
52	597	M Lattanzio - ENHD	Social Dominance, Social Networks, and Environmental Change: Contrasting Responses of Male Tree Lizards to Anthropogenic Disturbance
53	662	I Latella - ENHD	Habitat Use in Naturalized Anolis Lizard Communities.
54	664	K Winchell - ENHD	Phenotypic shifts in urban populations of the tropical lizard, <i>Anolis cristatellus</i>
55	145	A Nash - ENHD	Vigilance Behavior of <i>Ctenosaura similis</i> , the Spiny-Tailed Iguana: Group Size, Rank, and Spatial Effects
56	609	A Coleman - ENHD	Efficacy of Three Artificial Cover Materials in Herpetological Surveys
57	283	C Schalk - ENHD	Community Assembly of Anurans in the Gran Chaco: A Morphological Approach
58	451	D McKnight - ENHD	An Effective Method For Increasing the Catch Rate of Pitfall Traps
59	469	J Rearick - ENHD	Is Environmental Niche Correlated with Freeze Endurance?
60	741	J Nifong - ENHD	Animal-borne imaging reveals theory-challenging insights into foraging success and strategies of a large-bodied apex predator, the American Alligator ( <i>Alligator mississippiensis</i> )
61	499	K Baumberger - ENHD	Home range and habitat preference of the western spadefoot ( <i>Spea hammondi</i> ) in Orange County, California protected areas
62	605	K Landolt - ENHD	Using Visible Implant Elastomer to Mark Early-Stage Tadpoles: an Assessment of Survival, Mark Retention, and Mark Migration
63	324	A Bennett - ENHD	Does Maternal Investment Influence Offspring Response to Predation Risk? Rearing Captive-Bred Northern Leopard Frog Tadpoles in the Presence or Absence of Aeshnid Dragonfly Larvae
64	488	P Anderson - ENHD	Confronting Models with Data: Using Environmental DNA for the Verification of Niche Models
65	206	P Lindeman	Reproductive Allometry of the Sabine Map Turtle ( <i>Graptemys sabinensis</i> ) in Southwestern Louisiana
66	118	L Etchison - SI	Fish Assemblages and Side Scan Sonar in the Wabash River of Indiana
67	168	V Derouen - SI	Phylogeny and Deep-Sea Habitat Shifts in Batfishes (Lophiiformes)
68	191	E Lemons - SI	Montezuma's Revenge: Taking a stab at genetic variation within <i>Xiphophorus montezumae</i> (Poeciliidae)
69	372	J Cureton II - SI	Revisiting the Evolution of Parental Care in Fishes using the New Euteleost Tree of Life Phylogenetic Hypothesis
70	417	M Burns - SI	A new species of <i>Leporinus</i> (Characiformes: Anostomidae) from the Orinoco Basin, Venezuela
71	437	M Malone - SI	Early Invasion of <i>Neogobius melanostomus</i> into Lake Michigan Tributary Streams: Competitive Interactions with Native Percid Species
72	452	T Buser - SI	Physiological Color Change In Marine Sculpins (Pisces; Cottidae)
73	464	K Kubicek - SI	Developmental Osteology of the Red Drum, <i>Sciaenops ocellatus</i> (Teleostei: Sciaenidae)
74	486	A Roa-Varón - SI	Back from the Dead or Alive and Well All Along? The Family Lyconidae (Gadiformes)
75	520	T Clardy - SI	Systematic Relationships of the Prickleback Family Stichaeidae (Cottiformes: Zoarcoidei) Using Morphological Data
76	634	H Pinheiro - SI	Richness and similarity of reef fish assemblages along the Vitória-Trindade Chain, southwestern Atlantic
77	642	Q Xu - SI	Diversity of Trout in Mexico as Evaluated by Geometric Morphometrics of Head Morphology (Onchorhynchus, Salmonidae)
78	649	B Frable - SI	The Oregon State Ichthyology Collection: rehabilitation and digitization of an exceptional library of fishes
79	687	J Arroyave - SI	Molecular phylogeny of the Loricariinae (Siluriformes: Loricariidae): congruence and conflict with previous hypotheses of intergeneric relationships
80	694	D Kim - SI	Phylogeography of the Longnose Dace, <i>Rhinichthys cataractae</i> (Cyprinidae), with an Emphasis on Populations in the Rio Grande Drainage
81	701	E Marchio - SI	The Business end of Belonesox: cranial osteology of the Pike livebearer <i>Belonesox belizanus</i> (Teleostei: Poeciliidae)
82	311	Q Ren - SI	Morphological Divergence and Evolution of Species in the Enigmatic and Diverse Genus <i>Sinocyclocheilus</i> (Cypriniformes, Cyprinidae)
83	421	K Piicher - SI	Filling the gap: current and historical factors influencing fish diversity in a poorly studied west Tennessee coastal plain stream
84	625	N Martinez - SI	Morphological Variation of the Blacktail Redhorse, <i>Moxostoma poecilurum</i> , and its closest relative, <i>Moxostoma</i> sp., across the Gulf Coast (Cypriniformes, Catostomidae)

ENHD = SSAR Ecology, Natural History & Distribution

SI = ASIH Storer Ichthyology

**2013 Joint Meeting of Ichthyologists and Herpetologists, Albuquerque, NM**  
**POSTER SESSIONS AT A GLANCE**  
**SATURDAY, 13 JULY, Poster Session II**

POSTER #		PRESENTER(S)	POSTER TITLE
1	401	A Thomaz - N	Molecular Phylogeny of the Subfamily Stevardiinae Gill, 1858 (Characiformes: Characidae) – Major Clades and the Evolution of Reproductive Traits
2	653	M Palacios Mejia - N	Conservation implications based on the assessment of genetic diversity and population structure of the freshwater tropical gar ( <i>Atractosteus tropicus</i> ) in Middle America
3	257	D Green - N	Community phylogenetics and comparative phylogeography of the Fitzcarald fish fauna, southwestern Amazon
4	356	E Miller - N	A Molecular Phylogeny of the Neotropical Tripterygiidae (Teleostei: Blennioidei)
5	368	G Gondolo - N	Ichthyologic Diversity of Poti River, Parana River Basin, Northeastern Brazil
6	50	I Kaatz	Catfish stridulation: testing hypotheses of sound function among species in the genus <i>Corydoras</i>
7	772	M Raley	Comparative Mitogenomics of the Fieryblack Shiner, <i>Cyprinella pyrrhomelas</i> (Cope 1870)
8	742	M Warren	Update on "North American Freshwater Fishes: Natural History, Ecology, and Conservation"
9	679	J Nogle	The Impacts of a Reservoir Aeration System on the Food Web at Cherry Creek Reservoir, Aurora, Colorado
10	189	D Figueroa	Age and growth of puyen, <i>Galaxias maculatus</i> , from Parque Nacional Tierra del Fuego, austral Patagonia (54°S)
11	149	K Thompson	Artificially Produced Intergeneric Hybrids Among Eight Genera of Neotropical Cichlidae
12	546	W Klingbeil	Shoaling by Eastern Mosquitofish ( <i>Gambusia holbrooki</i> ) In Response to the Sight of a Potential Predator
13	109	K Lang	Conservation of Native Aquatic Species at the BioPark in Albuquerque, NM
14	689	E Carson	The <i>Cyprinodon julimes</i> experiment: a case study for development of a broadly effective conservation model in Mexico
15	593	C Matechik	Developing a Monitoring Protocol for the Pygmy Sculpin ( <i>Cottus paulus</i> )
16	581	D Hendrickson	Fishes of Texas Project: compilation, normalization and quality control of museum data
17	693	M Malone	Comparative Morphology of <i>Neogobius melanostomus</i> , the Round Goby, Upper and Lower Pharyngeal Jaw Dentition from a Lake Michigan Tributary Stream and Southern Lake Michigan
18	775	C McKellar	Environmental Effects on Scale Morphology in <i>Carassius auratus</i>
19	170	C Lerma	A tail of two fishes: evolutionary convergence and divergence in caudal peduncle morphology in southwestern native fishes
20	696	C Krabbenhoft	A mesocosm study of trophic interactions in a desert river (Rio Grande, New Mexico)
21	426	B Frenette	The Effects of Turbidity on the Growth of Young-of-Year Spotted Gar
22	400	J Sanchez	Cyanotoxin Detoxification and Effects on the Ecology and Evolution of the Sailfin Molly, <i>Poecilia latipinna</i>
23	221	S Tougas	Drivers of darter fish (Percidae) community composition in Tennessee, USA
24	193	N Mercado-Silva	Trophic Role of Lake Chapala (Michoacán and Jalisco, Mexico) Species of <i>Chirostoma</i> (Pisces, Atherinopsidae) Analyzed Using N and C Isotopic Signatures
25	61	A Hernández-Muñoz	Analysis of the Stomach Contents of the Fish Fauna of the Freshwater Spring in the Cienega Churince Cuatrociénegas, Coahuila
26	336	T Chafin	Conservation Genetics of Humpback Chub (Cyprinidae) in Grand Canyon, Arizona
27	473	M Bangs	Utilization of Molecular Markers to Examine Potential Hybridization in Bluehead Suckers ( <i>Catostomus discobolus</i> ) in the Weber River, UT
28	492	J Lopez	Mitochondrial Genome Rearrangement in Members of the Sculpin (Pisces; Cottidae) Subfamily, Oligocottinae
29	230	N Brown-Peterson	Life History Patterns in the Sciaenidae
30	526	F Segura-Guevara	Reproductive biology of Blanquillo ( <i>Sorubim cuspiacaudus</i> ) in the Sinu river seven years ago of filling of Urra Dams, Colombia
31	45	M Hayes	A Preliminary Phylogeny of West African 'Barbus' (Cyprinidae)
32	72	F Jerep	Revisionary study of the African genera <i>Nannocharax</i> Günther, 1867 and <i>Hemigrammocharax</i> Pellegrin, 1923 (Teleostei: Characiformes: Distichodontidae)
33	184	M Malabarba	Fossils, Synapomorphies and the Times of Divergence of Neotropical Cichlids
34	313	B Sidlauskas	The first molecular phylogeny of Chilodontidae (Teleostei: Characiformes) reveals cryptic biodiversity
35	447	N Perrinne	An Independent Observation of Facultative Parthenogenesis in the Copperhead ( <i>Agkistrodon contortrix</i> )
36	475	F Zaidan III	Testosterone Cycles in the Rock Rattlesnake ( <i>Crotalus lepidus morulus</i> ) in Nuevo Leon, Mexico
37	291	J Rheubert	Reproductive Biology of <i>Sceloporus consobrinus</i> (Phrynosomatidae): Male germ cell development and reproductive cycle comparisons within Spiny Lizards
38	606	B Lavin - SH	Molecular Dating and Fossil Taxa: The placement of fossil Anguinae within a Molecular Phylogeny
39	360	T Anderson - SH	Nonlinear density-dependent competition in a predator alters prey size and survival within a larval salamander guild
40	245	M Eyre - SH	Exploring the Microhabitats of Marsupial Frogs: A Study of the Forces Driving Habitat Selection for <i>Flectonotus fitzgeraldi</i> on the island of Tobago
41	25	N Ginnan - SH	The Effects of Toe-Clipping on Leopard Frogs ( <i>Rana pipiens</i> ) and American Toads ( <i>Bufo americanus</i> )
42	533	M Breitman - SH	Synthesis of Morphological and Phylogenetic Patterns of the Southernmost Clade of South American Lizards, the <i>Liolaemus lineomaculatus</i> Section (Liolaemidae)
43	279	C Lind - SH	The Reproductive Ecology of the Timber Rattlesnake, <i>Crotalus horridus</i> , in Northwest Arkansas

N = NIA Best Student Poster

SH = ASIH Storer Herpetology

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**POSTER SESSIONS AT A GLANCE**  
**SATURDAY, 13 JULY, Poster Session II**

POSTER #		PRESENTER(S)	POSTER TITLE
44	256	M Kern - SH	Factors Causing Deviation from Optimal Egg Size Theory in the Diamondback Terrapin ( <i>Malaclemys terrapin</i> )
45	220	B Colteaux - SH	Historic Commercial Harvest of the Common Snapping Turtle, <i>Chelydra serpentina</i> , in Virginia
46	639	M Guerra	Ontogeny of Sexual Dimorphism in the Larynx of the Túngara Frog, <i>Physalaemus pustulosus</i>
47	94	L Franco-Belussi	Extracutaneous pigmented cells in <i>Eupemphix nattereri</i> (Anura:Leiupeidae) are responsive to $\alpha$ -Melanocytes Hormone Stimulating
48	331	P Lewis	Cranial Morphology of <i>Zygaspis quadrifrons</i> Revealed by High Resolution X-ray Computed Tomography
49	363	A Mapps	Analysis of a Gekko gekko Skull Using High Resolution X-ray Computed Tomography
50	403	C Cadena	Cranial Morphology of the Cape Dwarf Gecko ( <i>Lygodactylus capensis</i> ) Using High Resolution X-ray Computed Tomography
51	471	B Truett	Revisiting the Aquatic Anole Ecomorph
52	534	K Nobleza	Cranial Endocast of the Amphisbaenian <i>Zygaspis quadrifrons</i>
53	560	F Irish	Snout and Jaw Mobility in Sand Boas: Balancing Conflicting Functional Demands
54	699	R Durtsche	Developmental Variation of <i>Xenopus laevis</i> in Response to an Anti-fungal White-nose Bat Syndrome Treatment from a Geometric Morphometric Study
55	726	R Nali	Internal Oral Morphology of <i>Bokermannohyla ibitiguara</i> Tadpoles (Hylidae, Cophomantini) from the Brazilian Cerrado
56	332	G Gerald	Is locomotor performance in <i>Ophisaurus</i> lizards convergent with that of snakes?
57	749	L Barr	Rattlesnake Slithering: A Hypothesis
58	265	M Edwards	Dehydration and Drinking Response of the Gulf Salt Marsh Snake
59	790	J Sandoval	Thermal Ecology of <i>Urosaurus ornatus</i> in the Northern Chihuahuan Desert
60	386	S Parker	Physiological ecology of the ground skink, <i>Scincella lateralis</i> , in South Carolina: thermal biology, water loss, metabolism and seasonal patterns
61	214	M Klukowski	Secondary Sexual Coloration is Related to White Blood Cell Counts and Testosterone in Male Southeastern Five-lined Skinks ( <i>Plestiodon inexpectatus</i> )
62	52	K Learn	Carotenoid Pigmentation in the Nuptial Coloration of Some Emydid Turtles
63	752	G Marvin	Influence of Temperature, Photoperiod, and Feeding on Tail Regeneration in a Semiaquatic Desmognathan Salamander
64	661	A Savitzky	A Miniature Transmitter for Recording Cardiac Function in Reptiles
65	554	C Gilbert	In vitro response of Human Myoblasts and Myocytes to the Whole Venom of <i>Crotalus viridis viridis</i>
66	110	M Stone	Relationship Between Environment, Osmotic stress, and Urinary Corticosterone in a Wild Population of Texas Tortoises ( <i>Gopherus berlandieri</i> )
67	618	R Lara-Resendiz	Thermoregulation of Two Sympatric Species of Horned Lizard in the Chihuahuan Desert and Their Local Extinction Risk
68	631	S Salinas	Diet of Invasive Frogs in Northeastern New Mexico on the Mora River
69	637	Z Parker	An analysis of vegetation and terrestrial characteristics of <i>Malaclemys terrapin</i> nest sites at North Inlet, South Carolina
70	461	R Hunt	<i>Ambystoma</i> Species and the <i>A. jeffersonianum</i> -hybrid Complex: A Comparison of Abundance in Established and Restored Wetland Habitats
71	309	J Juterbock	Location, Location, Location: Sites of Salamander Activity Are Significantly Related to the Loss of Water From Model Plethodontids
72	299	C Anthony	Using geographic variation in morph frequency to test apostatic selection for color in red-backed salamanders
73	298	C Hickerson	A comparison of the diets of erythristic and striped phenotypes of red-backed salamanders, <i>Plethodon cinereus</i>
74	84	C Beachy	Effect of Temperature, Sex, and Maturation Status on Metamorphosis in the Western Tiger Salamander, <i>Ambystoma mavortium</i>
75	647	B Cooper	Relative Influence of Predator Populations on Amphibian Assemblages in Urban Environments
76	736	R Ortega	The Impact of Invasive Bullfrogs on the Demographics of Northern Leopard Frogs in Northern New Mexico
77	678	J Pechmann	Providing Resting Places at All Depths Does Not Increase Growth or Survival of Tadpoles Raised in Vertical-sided Artificial Ponds
78	573	C Murray	The Interface of Natural Population Dynamics, Land Use and Enigmatic Disturbance: Understanding Human Conflict with a Sentinel Species
79	509	A Aguirre	Lung flukes associated to <i>Lithobates catasbeianus</i> in Janos, Chihuahua, Mexico
80	763	G Perry	Ecology and Life History Characteristics of the Repatriated Stout Iguana Population of Guana Island, BVI
81	706	G Castañeda	Thermoregulations of <i>Uta stansburiana</i> at the South of its Distribution
82	708	S Valenzuela	Thermal ecology of the spiny tailed lizard <i>Ctenosaura oaxacana</i>
83	589	A Díaz de la Vega	Thermoregulation in Two Sympatric Lizards <i>Sceloporus poinsettii</i> and <i>Sceloporus lineolateralis</i> (Squamata: Phrynosomatidae) in Durango, Mexico
84	514	A Fitzgerald	Effects of Habitat Fragmentation on Community Structure and Diet of Lizard-Eating Snakes
85	485	A Reza	Niche partitioning and population structure of an assemblage of water snakes (Homalopsidae) from Bangladesh
86	244	R Weaver	Diet and Foraging Ecology of the Racer ( <i>Coluber constrictor</i> ) from Central Washington State

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1	287	C Adams	Calling Habits of the Introduced Rio Grande Chirping Frog ( <i>Eleutherodactylus cystignathoides</i> ) - Preliminary Results
2	365	K Anderson	The call characteristics of <i>Spea bombifrons</i> X <i>Spea multiplicata</i> hybrids in Doña Ana County, New Mexico
3	630	R Saporito	Dietary Alkaloid Sequestration in a Bufonid Poison Frog: An Experimental Test of Alkaloid Uptake in <i>Melanophryniscus stelnzeri</i> (Bufonidae)
4	290	D Saenz	Differences in Occurrence of the Amphibian Chytrid Fungus, <i>Batrachochytrium dendrobatidis</i> , Between Urban and Forested Habitats
5	553	B Muncy	Capture Probability and Survivorship of <i>Eurycea cirrigera</i> in Drought and Non-drought Conditions
6	30	R Aldridge	Amphibian Pond Selection: An Inquiry Based Study for Rural High School Students
7	82	G Koehler	A Color Catalogue for Field Biologists
8	382	P Cupp	Evidence of Male Parental Care in Green Salamanders, <i>Aneides aeneus</i>
9	305	W Ryberg	Influence of weather conditions on activity of lizards in the Monahans Sands
10	41	M Gerson	Variation in tail-wagging behavior and associated morphological characteristics in the zebra-tailed lizard ( <i>Callisaurus draconoides</i> ) and its closest relatives within the phrynosomatid sand lizards
11	733	A Wilmes	Conspecific Pheromone Trailing and Pheromone Trail Longevity in the African Colubrid <i>Boaedon fuliginosus</i>
12	704	S Mackessy	Chemosensory Response in Stunted Prairie Rattlesnakes <i>Crotalus viridis viridis</i>
13	508	B Greene	Spatial and associative learning using landmarks in the Cottonmouth ( <i>Agkistrodon piscivorus</i> )
14	717	J Ortega	Prey Preference Determination in the Western Cottonmouth ( <i>Agkistrodon piscivorus leucostoma</i> )
15	776	A Roszkowski	The Effect of Handling and Training/Feeding on Breathing Rate of the University of Wisconsin-Stevens Point's American Alligator ( <i>Alligator mississippiensis</i> )
16	273	J Lin	Inter- and intra-island differentiation: A case from Japanese Treefrog widely distributed in Ryukyu and Taiwan
17	716	H Gadsden	Patterns of Lizard Species Richness within National Parks and Biosphere Reserves across North America's Deserts
18	705	C Aguirre	The effect of imprecise localities on modeling species distribution: a case study of the Plateau Striped Whiptail ( <i>Aspidoscelis velox</i> )
19	288	K Nicholson	Biogeography of <i>Norops capito</i> : Second Example of a Contradictory Pattern
20	218	R De Mello	Preliminary Data from Mitochondrial Gene Suggest Divergences Occurring in Tertiary and Quaternary Periods in Lineages of the Brazilian lizard <i>Tropidurus oreadicus</i> (Squamata:Tropiduridae)
21	438	T Okamoto	A phylogeographic study of three parapatric species of <i>Plestiodon</i> (Scincidae, Reptilia) on the mainland of Japan
22	100	T Machado	Phylogeography of <i>Bothrops neuwiedi</i> : Highly Structured Populations and Recent Demographic Expansion in the Brazilian Pitviper
23	361	G Gondolo	Extended Distribution of <i>Phrynos geoffroanus</i> Schweigger, 1812 (Testudines: Chelidae) for Parnaiba River Basin, State of Piauí, Northeastern Brazil
24	228	T Larson	Systematics the African Frog Genus <i>Amietia</i> (Anura:Pyxicephalidae) in Eastern Democratic Republic of the Congo
25	319	T Hibbitts	Resolving the identity of Texas <i>Desmognathus</i>
26	460	S Poe	Identification Key for Anolis Lizards
27	376	L C B Lima	Phylogenetic Relationships of the <i>Boa constrictor</i> Complex (Serpentes, Boidae): Preliminary Results Based on Mitochondrial Genes
28	129	M Morando	Phylogeographic Study Of <i>Liolaemus buergeri</i> (Iguania: Liolaemini) Based On Two Mitochondrial And Two Nuclear Gene Sequences
29	150	L Avila	Integrative Taxonomy: Adding Methodological Approaches To Species Delimitation In The <i>Liolaemus fitzingerii</i> Complex
30	160	N Conkey	Phylogenetic Relationships of the African Treefrog Genus <i>Arixalus</i> (Anura: Hyperoliidae)
31	764	R Ward	Effects of catastrophic wildfire on genetic structure of a population of Texas horned lizards ( <i>Phrynosoma cornutum</i> ) in South Texas
32	483	A Fox	Are roads a barrier to gene flow in a sand burrowing lizard, the Florida Sand Skink, <i>Plestiodon reynoldsi</i> ?
33	138	C Montgomery	Validation of Body Condition Indices in the Lizard <i>Sceloporus undulatus</i>
34	616	D Groebner	A Multi-species Herp and Mollusc Refugia
35	294	G Izzo	Investigating the Potential of Adaptations in Stream Salamanders to Road Salt in Urban Watersheds: The Role of Storm-Water Management Practices
36	281	M Stebbins	Orientation of Spotted Salamander ( <i>Ambystoma maculatum</i> ) Seasonal Migrations
37	202	D Steen	Prevalence of Ingested Fishing Hooks Within Free-roaming Freshwater Turtles
38	657	E Toffelmier	Comparison of PCR-based methods for the detection of the amphibian chytrid fungus ( <i>Batrachochytrium dendrobatidis</i> )
39	241	M Kwiatkowski	Association Between Chytrid Fungus and Symbiotic Skin Bacteria in East Texas Anurans
40	655	A Sacerdote-Velat	An invasive plant secondary metabolite disrupts embryo development in <i>Xenopus laevis</i> and a native amphibian, <i>Pseudacris triseriata</i>
41	390	J Gorsuch	Effects of Exotic Earthworm Infestation on the Microbiota of Salamander Habitats and Cutaneous Epiflora
42	131	G Sierra	Isolation of Salmonella and other Enterobacteria from the Box Turtle <i>Terrapene ornata</i>
43	628	K Albert	Snake community dynamics in a Southern Arizona urbanizing landscape
44	576	M Miller	An Examination of Lung Endoparasites of Invasive Burmese Pythons ( <i>Python molurus bivittatus</i> ) in South Florida
45	734	S Wiegel	Detection of Deltamethrin in Salamanders from Wind Cave National Park by High Performance Liquid Chromatography
46	388	M Gidis	<i>Lyciasalamandra</i> genus- A status review



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47	352	A King	Evolving Expectations: a Decade of Repatriating Tarahumara frogs ( <i>Lithobates tarahumarae</i> ) to Arizona, USA
48	327	Z Colon-Piñeiro	Subtle skeletal abnormalities in two Puerto Rican Eleutherodactylus species increase with forest fragmentation
49	462	S Kahl	Risk assessment model for brown treesnake introduction into the continental United States
50	411	S Ressel	Using citizen scientists to assess relative species abundance of terrestrial salamanders in Acadia National Park, Maine, USA
51	63	B Fetting	Amphibian Community Composition in Man-Made Ponds and Natural Wetlands in the Ouachita National Forest
52	493	S Kimble	Relatedness and other finescale genetic population processes in a declining forest-dwelling turtle <i>Terrapene c. carolina</i>
53	163	A Owens	Habitat use and activity of juvenile Sonoran desert tortoises in Central Arizona
54	754	L Cole	A Preliminary Status of the Big Bend Slider, <i>Trachemys gaigeae</i> in the Middle Rio Grande of New Mexico
55	579	S Hermann	Improving Conservation Efforts for the Gopher Tortoise ( <i>Gopherus polyphemus</i> )
56	588	J Griego	Leopard Frog Population Structure in Dynamic Environmental Conditions
57	677	W Parsons	Diurnal Activities and Metabolism of <i>Podarcis muralis</i> as an Introduced Species to the Greater Cincinnati Region
58	201	J Mitchell	Geographic Variation in Population Structure of the Suwannee Cooter ( <i>Pseudemys concinna suwanniensis</i> ) in a Blackwater River in Northern Florida
59	344	D Arcila	Revision of the Neotropical genus <i>Acrobrycon</i> (Ostariophysi: Characiformes: Characidae) with description of two new species
60	29	F Dagosta	Biogeographic signal in amazonian characiform fishes: conflicts and resolution
61	62	V Mendoza-Portillo	Potential Distribution of the Catostomidae in the Sierra Madre Occidental, Mexico
62	225	L Scarpitta	EToL: Molecular Systematics of Zeiformes: New Hypotheses About an Old Group
63	248	R Mayden	Biodiversity of Trout in Mexico (Salmonidae: Onchorhynchus): Variation in Some Morphological Traits of Taxonomic Significance*
64	250	R Thoni	Morphological Variation of the "Catostomus plebeius" Complex from the Rivers of the Sierra Madre Occidental, Mexico (Cypriniformes, Catostomidae).
65	767	D Portnoy	Unraveling the Phylogenetic Relationships of New World Searobins (Triglidae; Prionotini)
66	395	J Santana	Sperm characteristics indicate the existence of two different lineages within pencilfish genus <i>Nannostomus</i> (Characiformes: Lebiasinidae)
67	31	A Marranzino	Functional morphology of cephalic protuberances in the oyster toadfish, <i>Opsanus tau</i>
68	459	E Hilton	Skeletal anatomy of the head of the Chinese sturgeon, <i>Acipenser sinensis</i>
69	672	C Dillman	Comparative ontogeny of the jaws and feeding behavior in two sturgeons, <i>Acipenser transmontanus</i> and <i>A. oxyrinchus</i>
70	673	W Aguirre	Genetic divergence of a sympatric lake resident-anadromous three-spined stickleback <i>Gasterosteus aculeatus</i> species pair
71	782	C Purcell	Using pedigree and gene expression analysis to study and improve fitness and survival in early-life stages of reared California yellowtail ( <i>Seriola lalandi</i> )
72	613	T Diver	The evolution and maintenance of deeply divergent lineages of Red Shiner, <i>Cyprinella lutrensis</i> , in the Rio Grande watershed
73	565	S Macia	Seagrass Blowouts as Shelters for Seagrass and Reef Associated Fishes
74	404	C Petersen	Parasites and population genetics of <i>Fundulus heteroclitus</i> in New England: variation among several Maine estuaries
75	350	E Leung	The influence of El Niño Southern Oscillation on cohort structure in white seabass ( <i>Atractoscion nobilis</i> ) of Southern California
76	274	D Churchill	Trophic variation within and among hagfish species, a numerically dominant scavenger in the Gulf of Mexico
77	251	W Clark	Effects of Land Use on Macroinvertebrate Communities and White Sucker ( <i>Catostomus commersoni</i> ) Diet
78	103	B Anderson	Observations of Shark Scavenging on North Atlantic Right Whale ( <i>Eubalaena glacialis</i> ) Carcass in Northeast Florida
79	601	C Whitcombe	Kelp pipefish ( <i>Syngnathus californiensis</i> ), even though cryptic, are major prey of a visual, shallow-diving seabird
80	40	A Poostpasand	Lead Nitrate Induced Histopathological Changes in Kidney of Milk Fish ( <i>Chanos chanos</i> )
81	608	G Tordecilla-Petro	Evaluation of the Growth Basic Parameters of Moncholo ( <i>Hoplias malabaricus</i> ) for Several Annual Cycles in the Ciénaga Grande de Llorica, Sinu River System, Colombia
82	498	J Barkstedt	Determining the Frequency of Opercular Deformities in Age-0 Native Catostomids from the San Juan River (NM, CO, UT)
83	442	E Chipouras	Preliminary Characterization of Fish Assemblages Targeted by Small-scale Fishers in Mangrove-dominated Habitats of the Komo River and Mondah Bay Estuaries, Gabon, West-Central Africa
84	343	J Friel	Africhthy.org: A Virtual Research Environment and Web Portal for African Fishes
85	187	L Page	iDigBio, the National Coordinating Unit for the NSF-funded Advancing Digitization of Biodiversity Collections Project
86	233	J Harris	Revival and New Directions for a Historic Otolith Collection Transferred to the UW Fish Collection
87	732	T McInnes	Georeferencing Museum Fish Collections: FishNet2 and GEOlocate--A 7-Month Progress Report
88	747	H Prestridge	The Collection of Fishes at the Biodiversity Research and Teaching Collections: an under-utilized Ichthyological resource deep in the heart of Texas
89	458	E Lescak	Mitochondrial Clade Distributions in Threespine Stickleback Populations Across the North Pacific Basin
90	598	E Salas	Biogeography of <i>Chromis</i> in the Eastern Pacific and Atlantic oceans

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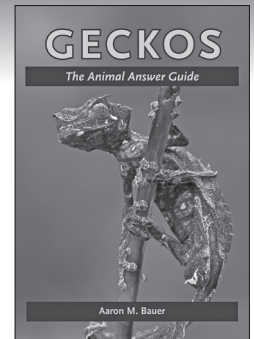
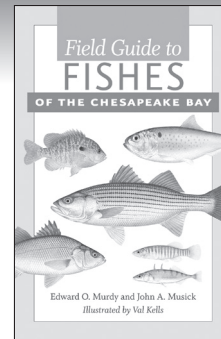
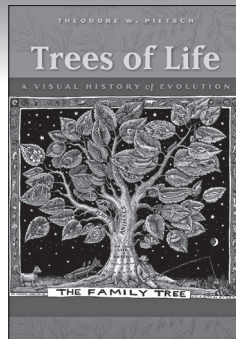
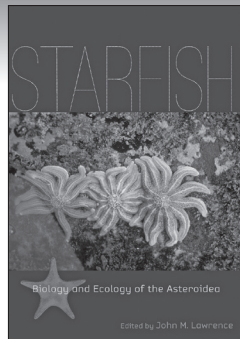
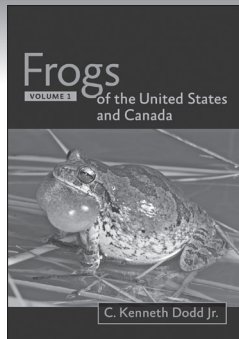
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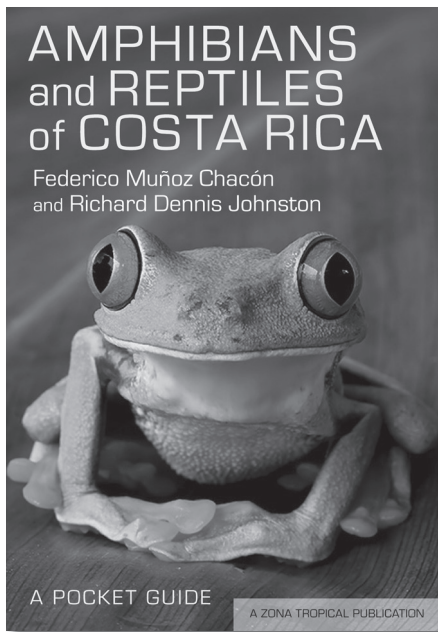
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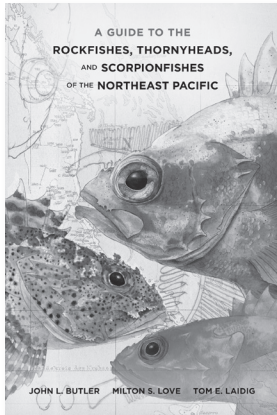
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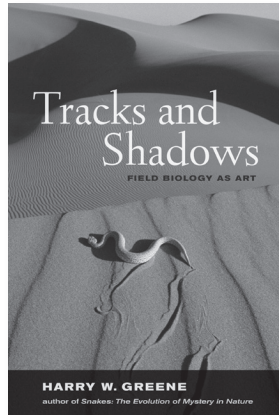


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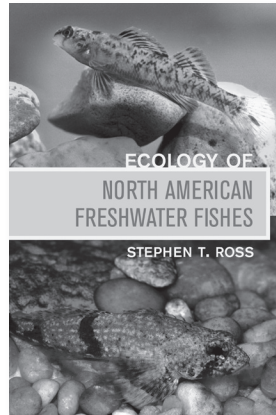


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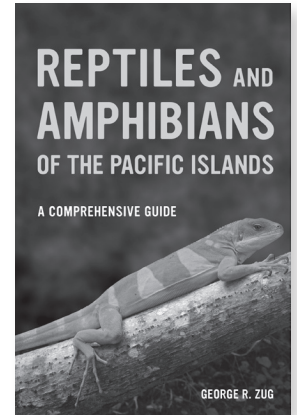


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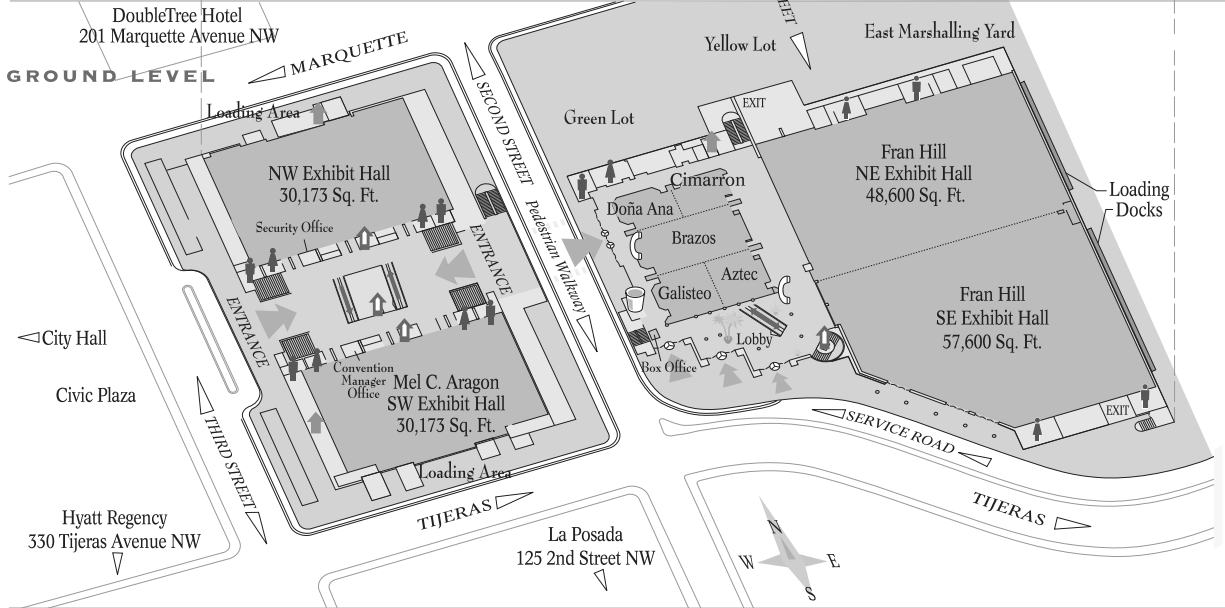
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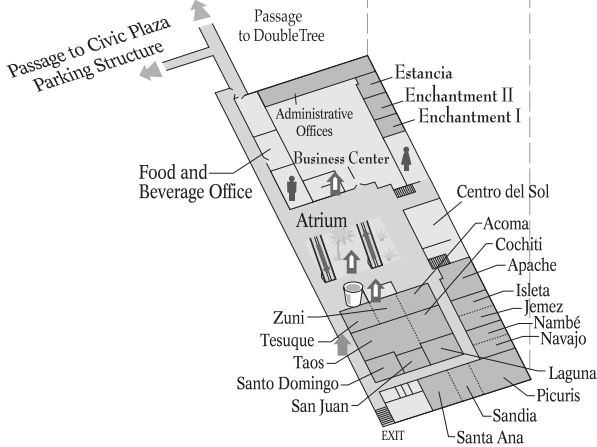


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