



ANNUAL MEETING ANNOUNCEMENT AND CALL FOR PAPERS

59th ANNUAL MEETING SOUTHWESTERN ASSOCIATION OF NATURALISTS APRIL 19-22, 2012

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UNIVERSIDAD AUTÓNOMA DEL ESTADO DE MÉXICO (UAEMEX) Valle de Bravo, Estado de México

The **Universidad Autónoma del Estado de México** and The **Southwestern Association of Naturalists** extend a cordial invitation to all those interested at the national and international level to participate in SWAN's 59th Annual Meeting, April 19–22, 2012, in Valle de Bravo, Estado de México.

UAEMEX will be the host institution where there will be presented topics related to taxonomy, systematics, morphology, ecology, behavior, evolution, and physiology of plants, invertebrates, fish, amphibians, reptiles, mammals and birds, with plenary speakers and paper and oral presentations.

The Local Committee and the entire community of the Universidad Autónoma del Estado de México extend a warm welcome.



Contact Information (Local Chair):

Dr. Felipe de Jesús Rodríguez Romero
e-mail: fjrr@uaemex.mx

Local Committee

Dra. Alma S. Velázquez Rodríguez; Dra. Petra Sánchez Nava; M. en C. Aleida García Cruz; M. en C. Ruth Moreno Barajas; M. en C. Ana Laura Valencia Flores; Biól. Sandra Galindo Gil; Biól. Liliana Ríos Rodas; Biól. Jenny Galán Nava; Eileen Oviedo Quiroz; Iris Saraí Vilchis García; Ana Cristina Díaz Serrano; Daniel Estrada Díaz; María de Guadalupe López Garduño; Gil Martínez Bautista; Eduardo Mendoza Almazán; María Esther Morales Morales; Hugo Pillado Correa; Abraham de Jesús Jardón Perea; Gabriel Suárez Varón.

REGISTRATION AND PAYMENT INSTRUCTIONS

If you work/study in Mexico or Latin America, see the Instructions in Spanish at the SWAN website at <http://www.biosurvey.ou.edu/swan/meet12/registers.php>.

If you work/study in the United States, use the following instructions in English at <http://www.biosurvey.ou.edu/swan/meet12/register.php>. Fill it out on-line and submit it.

EVERYONE MUST REGISTER ON-LINE FOR THE MEETING.

- **Payment by check or money order (only those inside Mexico), but the local committee recommends the use of credit or debit cards.**
 - Please fill out the on-line registration form at www.biosurvey.ou.edu/swan/meet12/register.php and submit it even if you will not be paying by credit or debit card. Print off your completed on-line registration form and send it along with a check or money order for the total registration costs (and payable to SWAN 2012) to:

Dra. Alma S. Velázquez Rodríguez
Facultad de Ciencias
Universidad Autónoma del Estado de México
Campus El Cerrillo, Piedras Blancas CP. 52000, Carretera Toluca – Ixtlahuaca Km. 15.5, Toluca, Estado de México

Correo electrónico: almaver@uaemex.mx

- Keep a paper copy of the online registration to take with you to the meeting as proof of registration.
- **Payment by Credit/Debit Card (Visa and MasterCard only):**
 - Once you have entered the registration site, you will be able to pay on-line



using the secure on-line forms.

- Save a paper copy of the completed Registration Form to take with you to the meeting as proof of registration.

REGISTRATION INFORMATION

Early registration deadline: March 9, 2012

Please use on-line form at the SWAN website

<http://www.biosurvey.ou.edu/swan/meet12/register.php>

YOU MUST REGISTER ON-LINE FOR THE MEETING (SEE LINE ABOVE FOR URL). DO NOT SIMPLY COPY THE LIST OF COSTS BELOW AND SEND IT TO SOMEONE. YOU MUST REGISTER ON-LINE.

Registration

Regular member	\$100.00 USD	\$130.00 US after March 9
Student member	\$70.00 US	\$95.00 US after March 9

Banquet	\$20.00 US
Picnic	\$20.00 US
T-shirt	\$15.00 US
Field trip	\$10.00 US (Sunday 22 April)

ABSTRACTS

Deadline for abstract submission: 27 January 2012

Abstracts must be in English and Spanish, In *Times New Roman 12* with a 400-word maximum for both languages combined. The author is responsible for providing the necessary translation. In addition, all posters presented at the annual meeting **should include the title and abstract in English and Spanish at the time of presentation** (when the poster is up for viewing). For oral presentations, while not mandatory, authors are encouraged to make their presentation friendly to a **bilingual audience** where possible (e.g., title, labels on figures, and conclusions).

Deadline for all abstracts and for Wilks and Hubbs Awards: 27 January 2012.

Deadline for complete application for the Wilks Award to be sent to the President-Elect is also 27 January 2012; for more information see

<http://www.biosurvey.ou.edu/swan/stuainstruceng.htm>.

Abstract submission:

Titles and abstracts must be in English and Spanish. Please note that the presenting author (oral or poster presentation) must be registered for the meeting. All abstracts will be submitted electronically from the following webpage:



<http://www.biosurvey.ou.edu/swan/meet12/abstract.php>. Copy and paste the abstract into the form.

The abstract should include:

- Presentation type (oral or poster) followed by a request for consideration for award competition (Wilks or Hubbs), if applicable.
- The general topic that best describes your presentation (Taxonomy, Systematics, Morphology, Ecology, Behavior, Evolution, Physiology) followed by the taxonomic group of study (Plants, Invertebrates, Fishes, Amphibians, Reptiles, Mammals, Birds).
- Title in all capital letters in English and Spanish with a slash between them.
- Author(s) and affiliation(s). If there are multiple authors, indicate the presenting author with an underline. Use numbers to identify institutional affiliations.
- Abstract limited to 400 words in total for both English and Spanish combined.

Examples:

Poster

Ecology - Invertebrates

SPIDERS OF ASH MEADOWS NATIONAL WILDLIFE REFUGE, NEVADA, USA /
LAS ARAÑAS DEL REFUGIO NACIONAL DE VIDA SILVESTRE ASH MEADOWS,
NEVADA, USA

Sarah C. Crews¹ and Lawrence E. Stevens²

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²Museum of Northern Arizona, 3101 North Fort Valley Road, Flagstaff, AZ 86001

We studied the spider fauna of Ash Meadows National Wildlife Refuge on six collecting expeditions during October 2004-August 2005. Spiders collected during these field trips produced ≥ 81 species in 60 genera and 26 families. Faunal diversity was dominated by Salticidae (≥ 13 species in seven genera), followed by Lycosidae (eight species in seven genera), Araneidae (eight species in seven genera), Gnaphosidae (seven species in seven genera), and Philodromidae (four species in four genera), with Thomisidae, Linyphiidae, Dictynidae, Theridiidae, Miturgidae, Pholcidae, and Tetragnathidae represented by two to seven species in one to three genera each. A total of 14 other families was represented by single species in single genera. The family Lycosidae was at more sites than any other family and it was the family with the largest number of individuals collected. We report an overall landscape-based density of species of only 0.96 species/km² and, although 45.7% of species were represented by single specimens, we conclude that the fauna is depauperate. This is consistent with other low elevation desert and playa-dominated habitats in North America, and might be attributable to limited formation of soil.



Estudiamos la fauna de las arañas del refugio nacional de vida silvestre Ash Meadows en seis expediciones de colecta de octubre 2004 a agosto 2005. Encontramos ≥ 81 especies de 60 géneros y 26 familias. La diversidad fue dominada por Salticidae (≥ 13 especies en siete géneros), seguida por Lycosidae (ocho especies en siete géneros), Araneidae (ocho especies en siete géneros), Gnaphosidae (siete especies en siete géneros), y Philodromidae (cuatro especies en cuatro géneros), con Thomisidae, Linyphiidae, Dictynidae, Theridiidae, Miturgidae, Pholcidae y Tetragnathidae representadas por dos a siete especies de uno a tres géneros cada una. Un total de 14 familias fue representado por una sola especie en un solo género. La familia Lycosidae se encontró en más sitios que ninguna otra familia y tuvo los más individuos colectados. En la escala de todo el paisaje, registramos una densidad de especies de sólo 0.96 especies/ km² y aunque 45.7% de las especies fueron representadas por un solo espécimen, concluimos que la fauna es pobre en diversidad. Esto es consistente con otros hábitats desérticos de bajas alturas y los dominados por lagos playas en Norteamérica y quizás se atribuye a la formación limitada de suelo.

Oral - Wilks

Ecología – Reptiles

BIOTIC AND ABIOTIC FACTORS THAT PROMOTE NESTING IN LIZARDS OF THE SCALARIS CLADE: AN EVOLUTIONARY APPROACH / FACTORES BIÓTICOS Y ABIÓTICOS QUE PROMUEVEN LA ANIDACIÓN DE LAGARTIJAS DEL CLADO SCALARIS: UN ENFOQUE EVOLUTIVO

García-Cruz Aleida, Velázquez-Rodríguez Alma S. y Rodríguez-Romero Felipe.

Laboratorio de Ecología, Evolución y Conservación de Vertebrados, Centro de Investigación en Recursos Bióticos, Universidad Autónoma del Estado de México. El Cerrillo Piedras Blancas, km 15.5 Carretera Toluca-Ixtlahuaca, C.P. 50200. Toluca, Estado de México.

Among the biotic and abiotic factors that influence the development and growth of lizards, temperature mainly has been studied. Soil temperature affects nesting stage, as the eggs are deposited in the mounds of soil left by gophers as they make their tunnels. The objective of this research was to determine the influence of biotic and abiotic factors involved in oviposition site selection of the lizards *Sceloporus aeneus* and *Sceloporus scalaris* adapted to high mountain conditions. We visited four zones and recorded temperature data of the soil of the mounds, and we took samples for physical and chemical analysis. Soil temperature showed a tendency to decrease with increasing depth, despite the temperature changes throughout the year. The soil characteristics were similar in all zones, presented a slightly acidic pH, high values of organic matter and high cation exchange capacity. Porosity decreased as an effect of rain. All these features are used by the lizards, as this benefits their development during the nesting period under high altitude conditions.

Entre los factores bióticos y abióticos que influyen en el desarrollo y el crecimiento de los lacertilios, principalmente se ha estudiado la temperatura. La temperatura del



suelo influye en la etapa de anidación, ya que los huevos son depositados en los montículos de suelo que dejan las tuzas al hacer sus túneles. El objetivo de la investigación fue determinar la influencia de los factores bióticos y abióticos que intervienen en la selección del sitio de oviposición de las lagartijas *Sceloporus scalaris* y *Sceloporus aeneus* adaptadas a condiciones de alta montaña. Visitamos cuatro zonas y tomamos la temperatura del suelo de los montículos, y sacamos muestras para análisis físicos y químicos. La temperatura del suelo presentó una tendencia a disminuir conforme aumenta la profundidad, a pesar de los cambios de temperatura ambiental a lo largo del año. Las características del suelo fueron similares en todas las zonas, presentaron un pH ligeramente ácido, valores altos de materia orgánica y alta capacidad de intercambio catiónico. La porosidad disminuye por el efecto de la lluvia. Todas estas características son aprovechadas por las lagartijas, ya que esto favorece su desarrollo durante la etapa de anidación bajo las condiciones de alta montaña.

Preparation of presentations:

Poster Presentations:

Posters must be no larger than 48 inches (122 cm) wide and 36 inches (92 cm) tall. The Local Committee will provide necessary supplies for mounting and exhibiting the poster during the Meeting.

Oral Presentations:

Each presentation will last 15 minutes, 12 minutes for presentation and 3 minutes for questions. We strongly encourage presentations in *Microsoft PowerPoint* or PDF saved to a USB flash drive. Presenters will be required to load their presentation on the computer prior to the start of their assigned session (see the session chair).

We ask that Student Travel Award winners acknowledge SWAN in the acknowledgements of their presentations.

STUDENT AWARDS

All application materials and information regarding student awards can be found on the SWAN website: <http://www.biosurvey.ou.edu/swan/stuaeng.htm>.

WILKS AWARD: The Wilks Award is presented to the student giving the best oral presentation at the Annual Meeting of the Association. Research must be primarily the work of the student, not of the major professor, and the student must be the first author of the abstract. From those submitting written summaries, a judging panel will select up to four students to make oral presentations (15 minutes in length) in a special plenary session at the beginning of the Annual Meeting. A winner will be selected from this group based on the quality of the oral presentation and the significance of the results. The Wilks Award has a cash award of \$1000, a certificate, and a set of all available back issues of *The Southwestern Naturalist*. The winner will



be announced at the Annual Banquet. **DEADLINE FOR APPLICATION: 27 January 2012.**

CLARK HUBBS STUDENT POSTER AWARD: The Clark Hubbs Student Poster Award is presented to the student or students displaying the best poster at the Annual Meeting of the Association. This award provides a certificate, a cash award of \$600, and a set of all available back issues of *The Southwestern Naturalist*. Although posters may be coauthored with the major professor, the work presented must be primarily that of the student(s). A panel of judges will select the winner based on the quality of the visual presentation and the significance of the results. **DEADLINE FOR APPLICATION: 27 January 2012.**

HOWARD McCARLEY STUDENT RESEARCH AWARDS: The Howard McCarley Student Research Fund provides up to five awards annually, up to \$1000 each, to support student research. Applicants must be students (undergraduate or graduate) currently enrolled in an institution of higher education, sponsored by a faculty member, and a member of the Southwestern Association of Naturalists. Awards will be made in support of any aspect of research on biota of the southwestern United States, Mexico, and Central America except for travel to meetings. Individuals may receive a maximum of two grants from the Association. All qualified students are encouraged to apply, especially those in developing countries. Grant applications may be in either English or Spanish. Two letters of recommendation must be submitted in support of the application. One must be from the research advisor and the second from someone familiar with the student's academic career and proposed research project. Awards will be announced at the banquet of the Annual Meeting of the Association. **DEADLINE FOR APPLICATION: 15 January 2012.**



Hotels in Valle de Bravo, State of Mexico

No	Name	Address	Telephone	Rooms	Cost (pesos)	Services	Distance to Center
1	Training Center ANUIES-Valle de Bravo	Boulevard Juan Herrera y Piña s/n Col. El Calvario.	(726)2 62 09 58	19	Sunday – Thu 15 single rooms: \$700 2 double rooms:\$900 2 suites:\$1200 Friday/Sat Single \$750 Double \$960 Suite \$1200	with all the comforts for a pleasant stay, with plasma television, telephone, air conditioning, wired and wireless internet	
2	Posada Familiar Dalinda	Calle 16 de Septiembre Center of Valle de Bravo	2 62 65 72	16	Sunday – Thu (Prices not including 20% tax) Double room (4 pers) \$800 Double room (2 persons)\$650 Double room (2 persons-king size bed \$800 Friday-Sat Double room \$1000 Double (single beds) 800	Two blocks from the center of Valle de Bravo, rooms with own bathroom, shopping, pool, TV in every room	12 minutes from meeting site
3	Hotel Tonancalli	Francisco Gonzalez Bocanegra #312 Center of Valle de Bravo	2 62 00 78	11	Rooms for 1-2 persons \$550 3-4 persons \$650	Hot water all day; cable TV, wireless internet	12 minutes from meeting site
4	Hotel Los Arcos	Francisco Gonzalez Bocanegra #310 Center of	2 62 00 42 2 62 01 68	24	Sunday – Thurs Single \$850 Double \$900 Friday-Sat	Chiminea (hearth); pool, cable TV, parking	12 minutes from meeting site



59th Reunión anual
59th Annual meeting
Valle de Bravo,
México 2012



Southwestern Association of Naturalists

		Valle de Bravo			Single \$900 Double \$1207		
5	Hotel Valle Dorado	San Pablo #119 San Antonio, Valle de Bravo	2 62 14 36	11	1 room w/ 4 beds \$950 2 rooms w/ King beds \$600 7 rooms w/ 2 beds \$950 1 suite-3 persons \$1700	Cable TV, wireless internet, full bath, parking, shopping	7 minutes from meeting site
6	Hostal de Paola	Boulevard Juan Herrera y Piña #134 Col. El Calvario.	2 62 71 01	6	Monday – Thu single rooms- 2 persons \$800 3 pers \$1050 4 pers \$1250 Friday/Sun single rooms- 2 persons \$950 3 pers \$1250 4 pers \$1450	Breakfast, parking www.hostalpaola.com.mx	5 minutes from meeting site
7	Hotel del ISSEMYM	Independencia #404 Center of Valle de Bravo	2 62 00 68	48	Single \$699 Double \$796 King \$908	Hotel services for 120 people; Restaurant for 160 w/ cost of \$220 for breakfast and dinner; Pool, cable TV, parking	12 minutes from meeting site
8	Hotel Misión Refugio del Salto	Fontana Brava S/n Col. Avandaro C.P. 51200 Valle de Bravo	2 66 27 53 2 66 27 54 2 66 27 55 2 66 27 61 2 66 27 73	16	Sunday – Thu Single/double: \$1335 Friday/Sat \$1570	16 luxury hotel rooms; international restaurant, wine cellar, sushi bar, lobby bar, heated pool, jacuzzi, shopping, area for kids; wireless internet, natural waterfall, parking, www.hotelesmision.com.mx	12 minutes from meeting site



9	Hotel Loto Azul	Antiguo camino a Rincon de estadas Valle de Bravo	2 62 01 57	39	Room w/ 2 beds and breakfast \$2800	Internet, cable TV, shopping, restaurant, parking www.hotellotoazul.com.mx	8 minutes from meeting site
10	Hotel Avandaro & Spa Resort	Vega del Rio S/N Fracc. Avandaro	2 66 03 70	76	Sunday – Thu 20 single rooms: \$1550 16 double rooms: \$1550 40 jr. suites: \$2060 Friday/Sat Single \$1950 Double \$1950 Suite \$2510	Hotel service, restaurant, parking, golf course, pool, large capacity jacuzzi, sauna, chimineas www.hotelavandaro.com.mx	30 minutes from meeting site
11	Hotel el Santuario	Carretera a Colorines km 4.5 ex Hacienda San Gaspar	2 62 91 00	64	Single rooms \$4367 – 4650	Restaurant, Bar, pools, tennis courts, golf course, chimineas, jacuzzi, sauna, www.elsantuario.com	

MEETING FACILITIES AND EQUIPMENT

The meeting will take place at the facilities of the National Association of Universities of Higher Education/Asociación Nacional de Universidades de Educación Superior (ANUIES) in Valle de Bravo, State of Mexico. There will be rooms and computer equipment needed for oral presentations and Internet service.

FOOD SERVICE

Drinks (water, tea, coffee, juice, soda) and snacks/donuts/cookies will be free and provided in the ANUIES cafeteria in the morning and afternoon meeting breaks on Friday and Saturday. There will also be a food and drinks buffet for lunch. Additionally, there are inexpensive restaurants near the ANUIES "Centro de Capacitación" where you can buy other foods and soft drinks.



SOCIAL ACTIVITIES

Meeting registration begins on Thursday afternoon, 19 April, in the ANUIES center, located 15 minutes by foot from the center of Valle de Bravo (five minutes by car). After registration there will be a welcome reception at the ANUIES "Centro de Capacitación" (7 to 10 pm on Thursday). On Friday night there will be a picnic with a BBQ, soft drinks, and a band, close to the Valle de Bravo pier, which is located ten minutes from downtown. The closing banquet will be held Saturday evening at a downtown restaurant in Valle de Bravo. There will be a social (students only) prior to the banquet on Saturday evening in the ANUIES Center.

STUDENT WORKSHOP

A student workshop will be held Friday 20 April in one of the rooms of the ANUIES Center during lunch. There will be a check-box on the registration form for students to indicate whether they wish to participate (more details later).

RECREATIONAL ACTIVITIES

If you wish to participate in walking tours of Valle de Bravo, please contact the local committee members so they can provide information about this city, which is included in the Magic Towns federal government program and which offers special treatment for tourists.

TRAVEL

The ANUIES Center is located in the northern part of Valle de Bravo, two hours from Toluca, State of Mexico. The address of the ANUIES center is: **Boulevard Juan Herrera y Piña s/n Col. El Calvario**. Also, you can visit the following website for more information (<http://www.vb-anui.es.mx/>).

To get to Valle de Bravo from the United States, the local committee recommends the following **as the best option** for travel to Mexico: take a direct flight from airports in Dallas or Houston to Toluca. Airlines with this service are Aeromexico, Continental, and United Airlines.

On 19 April there will be two buses belonging to the Universidad Autónoma del Estado de México (UAEMEX) for free transportation from Toluca Airport to Valle de Bravo; one will depart at 12:00 hrs and another at 17:00 hrs. This latter bus will take you directly to the welcome reception at the ANUIES Center.

If you travel by bus to Valle de Bravo by your own arrangements, you should take a taxi from the Toluca Airport to the central bus station in Toluca (approximate cost \$40 Mexican pesos) and then buy a ticket on platform 6 for the bus to Valle de Bravo, explaining to the driver that your exit preference is for "Saúcos or Monumento" and whose estimated cost is \$60 Mexican pesos (the trip time is approximately 2.5 hours).



If you arrive to Mexico City (**not recommended due to travel time**) you must go (preferably by taxi) to the Central Bus station called "Terminal Poniente" (near the Metro station Observatorio), then buy a bus ticket (Greyhound) to Valle de Bravo. The bus is called "Zinabus" or "Zinacantepec y Ramales" and costs about \$140 Mexican pesos. Approximate travel time from Mexico City is 3.5 hrs.

On Sunday 22 April, we will provide a UAEMEX bus to transport those attending the meeting from Valle de Bravo to the airport in Toluca. The bus will be ready to board at 9:00 am.

On Monday, 23 April, there will be another bus to transport conference attendees from Valle de Bravo to the airport in Toluca. This will leave at 9:00 am.

FIELD TRIP

We have one field trip planned to the Natural Park "Velo de Novia". Cost is \$10 US only for transportation, not including food or beverages. At the park you can buy local food (quesadillas, gorditas, tacos) and soft drinks, and also handicrafts of the area.

This will be a very pleasant walk, surrounded by nature. The site is a place that has a temperate climate thanks to the great number of abounding trees. The park is set up with hiking trails built specifically to admire the different tree species of the area, and also has a viewpoint from which you have a panoramic scene of the town of Valle de Bravo. To reach the waterfall, you walk for 20 minutes while appreciating the natural surroundings, accompanied by the sound of water flowing over rocks. Once there, you can see the waterfall and river. The waterfall is an impressive 8 meters tall, fed by a stream, and takes its name from the form the water takes as it falls, giving the appearance of a huge, white wedding veil.

During the walk you may find local handicrafts made by indigenous Indian Mazahuas. Upon returning to Valle de Bravo, we propose a visit to the craft market where you can find other handicrafts from the State of Mexico and other states of Mexico (like Michoacán, Guerrero and Jalisco). This market is famous for its different embroidered fabrics and openwork, as well as the region's pottery and other handmade artisanry.

FINAL NOTE

The local committee of the 59th Annual Meeting of the Southwestern Association of Naturalists awaits you in Valle de Bravo, Estado de Mexico, to exchange scientific information promoting the understanding and conservation of natural resources and the cultural and academic exchange among the countries of the Association!!!