



From Incubation to Infancy: The (Re)Birth of a Region

First Annual Regional Meeting

May 31 - June 2, 2007

University of New Mexico

Albuquerque, New Mexico

SW PARC
First Annual Regional Meeting

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SW PARC

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Introduction

PARC Mission

To conserve amphibians, reptiles and their habitats as integral parts of our ecosystem and culture through proactive and coordinated public/private partnerships.

About SW PARC

Southwest PARC is a working group organized for the purpose of implementing the PARC mission within the southwestern U.S., including Arizona, California, Colorado, Oklahoma, Nevada, New Mexico, Texas, Utah, and Hawaii. The southwestern United States has a very high diversity of amphibians and reptiles, including the most rattlesnake species as well as some of North America's most threatened frog and toad species. The Southwest faces a number of conservation challenges, including ongoing drought and water resource consumption, an ever-expanding human population, habitat and land conversion, and the introduction of crayfish, bullfrogs, and other non-native species into amphibian and reptile habitats.

2007 SW PARC Co-Chairs

Matt Goode

Senior Co-Chair
Research Scientist
Wildlife Conservation and Management
School of Natural Resources
The University of Arizona

Craig Ivanyi

Junior Co-Chair
General Curator of Living Collections
Curator of Herpetology, Ichthyology,
& Invertebrate Zoology
Arizona-Sonora Desert Museum

PARC National Coordinators

Ernesto Garcia

Federal Agencies Coordinator

Priya Nanjappa Mitchell

State Agencies Coordinator

2007 Planning Committee

Valerie Boyarski
Polly Conrad
Tom Giermakowski
Randy Gray
Cristina Jones
Larry Jones
Larry Kamees
Rob Lovich
Charlie Painter
Kenley Weaver Martin

Additional thanks to

Kim Fields
Tom Jones
Esther Nelson
Bruce Taubert
Marty Tuegel
Frank Toupal

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Cibola National Forest

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Special Thanks

University of New Mexico
Museum of Southwest Biology
Arizona Game & Fish Department
U.S. Fish & Wildlife Service (Las Vegas Office)
U.S. Fish & Wildlife Service (Hadley Office)

Vendors & Exhibitors

Tucson Herpetological Society
<http://tucsonherpsociety.org>

New Mexico Herpetological Society
www.corallus.com/nmhs.index.html

Stevan Logsdon Gallery
P.O. Box 4070, Silver City, NM 88062

ECO Herpetological Publishing & Distribution
www.reptileshirts.com

New Mexico Department of Game & Fish
www.wildlife.state.nm.us

Arizona Department of Game & Fish
www.azgfd.gov

RECON Environmental
www.recon-us.com

NRCS-USDA
www.nrcs.usda.gov

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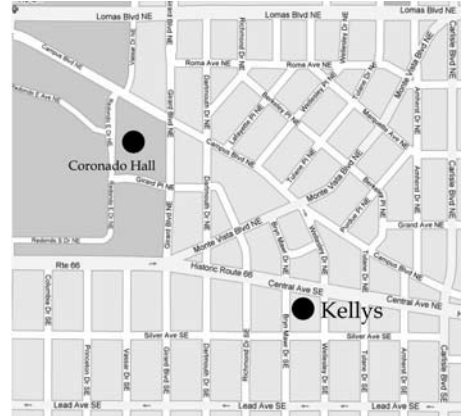
RECON is a company of specialists working with Pima County and other agencies in the southwestern United States to conserve herpetofaunal resources by developing implementable conservation measures including salvage and translocation, identification of sensitive populations, habitat restoration design, and management recommendations. RECON has offices in Tucson and San Diego.

SW PARC First Annual Regional Meeting

Agenda

Thursday, May 31

- 1200 - 2400 Dormitory Check-In**
Coronado Hall
- 1600 - 2000 Meeting Registration**
Coronado Hall
- 1800 - 2200 Icebreaker**
*Kelly's Brew Pub**
3222 Central Ave. SE
** Approximately a 10-minute walk
or 3-minute drive from campus.*



Friday, June 1

** All meeting sessions will take place in the Student Union Ballroom unless otherwise noted.*

- 0700 - 1200 Dormitory Check-in and Check-out**
Coronado Hall
- 0730 - 1600 Registration**
Student Union - Ballroom Lobby
- 0730 - 0845 Breakfast**
Student Union - Ballroom
- 0800 - 1600 Posters, Exhibitors & Vendors**
Student Union - Lobo A & B Meeting Rooms
- 0850 - 0910 Opening Remarks and Announcements**
Craig Ivanyi and Matt Goode, SW PARC Co-chairs
- 0910 - 0940 Keynote Speakers: Herpetological Conservation & PARC**
Ernesto Garcia, PARC Federal Agencies Coordinator
Priya Nanjappa Mitchell-Mitchell, PARC State Agencies Coordinator
- 0940 - 1020 Keynote Speakers: Regional Perspectives for PARC**
Valorie Titus (NE PARC)
Jeff Holmes (SE PARC)
- 1020 - 1040 Break**
Student Union - Lobo A & B Meeting Rooms

SW PARC First Annual Regional Meeting

Agenda

Friday, June 1 (cont.)

1040 - 1110 Keynote Speaker: Wildlife-friendly Pond Restoration: An Example of Making Partnerships Work for Herpetological Conservation

Jackie Charbonneau, Ecologist, USDA Natural Resources Conservation Service

1115 - 1230 Lunch

La Posada Dining Hall

1230 - 1430 Critical Herpetological Issues in the Southwest

Tom Jones, Arizona Game & Fish Department

Charlie Painter, New Mexico Department of Game & Fish

Polly Conrad, Nevada Department of Wildlife

Tina Jackson, Colorado Department of Wildlife

Laura Hines, Utah Division of Wildlife Resources

Betsy Bolster, California Department of Game & Fish

Duane Schlitter, Texas Parks & Wildlife

Oklahoma Representative

1430 - 1450 Break

Student Union - Lobo A & B Meeting Rooms

1450 - 1550 Perspectives on Herpetological Conservation in the Southwest

Myles Traphagen, Turner Endangered Species Fund

Kim Lovich, San Diego Zoo

Roger Repp, Tucson Herpetological Society

1600 - 1700 Preliminary Discussion: Selecting SW PARC Priorities

Presentation of questionnaire responses and selection of high priority issues

1800 Board buses bound for Cibola National Forest

Student Union (exact location to be announced)

1830 - 2100 Dinner

Oak Flats, Cibola National Forest

Barbecue courtesy of Charlie Painter & Larry Kamees

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Saturday, June 2

0700 - 1200 Dormitory Check-in and Check-out

Coronado Hall

0700 - 1000 Registration

Student Union - Ballroom Lobby

0700 - 0800 Breakfast

Student Union - Ballroom

0800 - 1600 Posters, Exhibitors & Vendors

Student Union - Lobo A & B Meeting Rooms

0800 - 0900 Structure of SW PARC: Getting Organized

Southwest PARC Form & Function

0900 - 0935 Funding Herpetological Conservation: Challenges & Opportunities

Making the Farm Bill Work for Herpetological Conservation – Randall Gray

How PARC can help get states the most SWG\$ for their SWAPs – Priya Nanjappa Mitchell

0935 - 1020 Resolution of SW PARC Priority Issues

1020 - 1035 Break

Student Union - Lobo A & B Meeting Rooms

1035 - 1215 Partnerships at Work Part I: Breakout Sessions

Small group discussion on high priority SW issues

What possible projects/products will address the issues?

What funding is needed?

What partners can we engage?

1215 - 1330 Lunch

La Posada Dining Hall

1330 - 1530 Partnerships at Work Part II: Breakout Sessions

Finalize Project Ideas

Assign Task Leaders

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Saturday, June 2 (cont.)

**1530 - 1600 Partnerships at Work Part III: Reporting and Setting Goals
Open Discussion** (*Working break included*)

Sign on the dotted line: Taking Responsibility for Next Year

Select/assign personnel to tasks

1600 - 1630 Wrap-up session: Final Details

Selection of next year's meeting location

Selection of dates and local contact

Election of new Co-chair and Steering Committee (as needed)

PARC Regional Working Group Co-chair Duties and Responsibilities

PARC officers typically serve on a two-year, staggered term, with a Senior and Junior Co-chair framework. Each year a new Junior chair is elected, and the former Junior becomes the Senior chair. The Senior chair typically is the primary point of contact, and as new officers begin their two-year term as a Junior chair, the Senior will provide some guidance to the Junior. Both officers work together as a team; one is not subordinate to the other. Individuals may serve additional (consecutive or subsequent) terms if re-elected.

Co-chairs are primarily responsible for the following tasks:

1. Organizing annual Regional Working Group (RWG) meetings:
 - a. coordinating venue, speakers, agenda, registration details, and delegating related tasks
 - b. publicizing meeting date, theme and/or objectives
 - c. leading/facilitating meeting discussions or delegating as needed
 - d. ensuring that meeting minutes are sent in a timely fashion
 - e. following up on action items periodically
 - f. following up with Task Team leaders and associated project progress periodically
2. Coordinating content on RWG webpage via National PARC website and/or separate regional website, if applicable
3. Serving as voting members on National PARC's Joint National Steering Committee (JNSC)
 - a. participating in monthly JNSC conference calls
 - b. attending annual JNSC meetings (at least one co-chair)
4. Reporting RWG activities and project progress to National PARC's JNSC
5. Reporting National PARC activities and project progress to RWG members
6. Attending and representing PARC at Regional/local herpetological and related conferences and events (or delegating this duty as needed).

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Sunday June 3

0700 - 1200 **Dormitory Check-out**

Coronado Hall

0700 **Field Trips**

LaJoya

The LaJoya area is owned by the New Mexico Department of Game and Fish and is a State Wildlife Area known for its diversity and good 'herping.' The area offers a wide variety of habitats as well (sand dunes, mesquite flats, cottonwood bosque, aquatic areas). This field trip will have a casual format allowing SW PARC participants to enter the site for group and self-directed exploration. The group will depart from the UNM campus Sunday morning and those individuals who drive their own vehicles can leave at whatever time suits their needs. Meals will not be provided. NMGF will be setting live traps the day before the trip to help ensure that field trip participants will be able to see some of the aquatic turtles present.

The Armendaris Ranch

The Armendaris Ranch, owned by former media mogul and conservationist Ted Turner, is home to a thousand bison, prairie dogs, pronghorn antelope, Aplomado falcons, and most recently the Bolson tortoise (*Gopherus flavomarginatus*). Twenty-six adult tortoises were introduced to the ranch last fall. This relocation of trans-epoch wildlife was performed by the Turner Endangered Species Fund, using a population of tortoises from the Appleton-Audubon Research Ranch near Elgin, Arizona. The tortoises were given to Ariel Appleton by the esteemed tortoise biologist Dr. David Morafka in the early 1970's. This is the only population of this highly imperiled species outside of Mexico. Our intent is to hold and breed this group and hold them as a genetic refuge. This trip will visit the two enclosures to see the tortoises and to learn how the introductions took place. Many more wildlife viewing possibilities will undoubtedly be available.

The Armendaris Ranch is located about 3 hours south of Albuquerque near the town of Truth or Consequences. The trip will depart at 7am and will return to Albuquerque in the evening.

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Abstracts - Presentations

CHARBONNEAU, JACKIE C.¹, IVANA M. NOELL¹, PETE A. VAN HOORN²

¹Natural Resources Conservation Service, Livermore Partnership Office, 3585 Greenville Road, Suite 2, Livermore, CA 94550; ²Alameda County Resource Conservation District, Livermore Partnership Office, 3585 Greenville Road, Suite 2, Livermore, CA 94550

Wildlife-friendly pond restoration on private grazing lands benefits the California red-legged frog (*Rana draytonii*) and California tiger salamander (*Ambystoma californiense*)

The Natural Resources Conservation Service, Alameda County Resource Conservation District, U.S. Fish and Wildlife Service, and Environmental Defense have created a program to benefit the federally threatened California red-legged frog (*Rana draytonii*) and California tiger salamander (*Ambystoma californiense*). Livestock watering ponds provide the majority of remaining aquatic habitat in Alameda County, CA, but most have exceeded their planned lifespan and will be lost if not repaired. Upland habitat surrounding the ponds is being lost to urban and ranchette sprawl. To support ranchers who want to repair, restore, and manage stock ponds and uplands for habitat, we are offering several incentives: (1) 90% cost share that leverages funds from NRCS, USFWS, and other sources; (2) programmatic environmental permitting; (3) Safe Harbor Agreements; and (4) facilitation of conservation and mitigation easement opportunities. NRCS technical specifications for pond repair were customized to meet the habitat requirements of the two amphibians, with assistance from several species experts. Because grazing management to benefit these species suffers from insufficient and often contradictory guidance, we are developing rigorous and practical guidelines. The program provides a much-needed model for using Farm Bill funds to assist species recovery and to help ranchers stay on the land.

Author to contact:

Jackie Charbonneau, Ecologist
Natural Resources Conservation Service, Livermore Partnership Office
3585 Greenville Road, Suite 2, Livermore, California 94550

Phone: (925) 371-0154, x114
jackie.charbonneau@ca.usda.gov

CONRAD, POLLY.

Nevada Department of Wildlife, Diversity Bureau, 4747 Vegas Drive, Las Vegas NV 89108, USA, pconrad@ndow.org

Nevada's Wildlife Action Plan: Herpetofauna

Congress passed the State Wildlife Grants program in 2001 in recognition of the need for funding of wildlife diversity programs. Congress mandated each state to develop a Wildlife Action Plan in order to continue to receive federal funds through the State Wildlife Grant program. Nevada's Wildlife Action Plan is intended to serve as a plan of action for herpetofaunal conservation and funding by targeting the amphibian and reptile species of greatest conservation need and the key habitats on which they depend, and lays out strategies for conserving wildlife in each of the key habitats. The strategies are also an impetus to engage state and federal agencies and other conservation partners to strategically think about their individual and coordinated roles in prioritizing herpetofaunal conservation efforts.

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Abstracts - Presentations

GARCIA, ERNESTO¹ and PRIYA NANJAPPA MITCHELL².

¹PARC Federal Agencies Coordinator, US Fish and Wildlife Service - Northeast Region, PO Box 2964, Weaverville, CA 96093, 530-623-1805, ernest_garcia@fws.gov ²PARC National State Agencies Coordinator, priya@parcplace.org, pnanjappa@fishwildlife.org, 847.672.9275

Partners in Amphibian and Reptile Conservation

Partners in Amphibian and Reptile Conservation (PARC) is a national organization with a mission to conserve herpetofauna through partnerships. Our ability to establish and foster diverse and successful partnerships has contributed greatly to our success and led to rapid growth over the past two years. Several conservation tools of national significance have been developed, and many new projects are underway. We will present information on our accomplishments, and discuss new projects where several opportunities for collaboration from the SW PARC community are available and/or necessary. We will also provide an update on recent efforts to develop a PARC Strategic Plan and long-term funding models.

GRAY, RANDALL.

Wildlife Biologist, Hillsboro, NM randygray1@msn.com

Making the Farm Bill Work for Herpetological Conservation

The Farm Bill is the largest private lands conservation program in history. Though called the Farm Bill it is misleading since it affects grasslands, forests, wetlands, prairies and other habitats of importance to herps. During the 2002 reauthorization of the farm bill Congress authorized \$17 billion for conservation programs such as the Conservation Reserve Program, Wetlands Reserve Program, Wildlife Habitat Incentives Program, Grassland Reserve Program, Farm and Ranchland Protection Program, and Environmental Quality Incentives Program. The programs are administered by the USDA Natural Resources Conservation Service and Farm Services Agency and priorities established at both the National and State level. All of these programs provide cost share for implementing conservation practices or cost share and funds to purchase easements to protect habitat. The implementation of these programs, both directly and indirectly, are having a significant affect on reptile and amphibian conservation. A greater focus (i.e., more funds) can be placed on reptile and amphibian conservation by working with USDA State Technical Committee to establish local priorities.

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Abstracts - Presentations

HINES, LAURA L.C.

Native Aquatic Species Biologist, Utah Division of Wildlife Resources, 1594 West North Temple, Suite 2110, Salt Lake City, UT 84114-6301, 801.538.4746

What's Herp'ning in Utah?

In 2005 the Utah Division of Wildlife Resources (UDWR) finalized the Comprehensive Wildlife Conservation Strategy (CWCS), which was made effective for the years 2005-2015. This Strategy was developed to obtain State Wildlife Grant (SWG) funding for native species that in the past lacked a funding source. The purpose of the CWCS is "to direct the integration and implementation of ongoing and planned management actions that will conserve native species and thereby prevent the need for additional federal listings." Within the Strategy, ten amphibian and thirty-two reptile species are listed as species in need of conservation. UDWR has adopted a three-tiered system that defines and prioritizes Utah's native species according to conservation need. Conservation actions are currently in place for the Desert tortoise, Columbia spotted frog, and Boreal Toad. These efforts will continue, and we are seeking funding to begin conservation actions for other amphibian and reptile species.

Additionally, Utah's Reptile and Amphibian Collection, Importation, and Possession rule went through an extensive and rigorous review from 2000 to 2007. May 2007, the new rule with its revisions was finalized. The rule still holds strict regulations for collection, importation, and possession of Utah's native species, but the creation of pre-authorized Certificates of Registration will allow an annually determined number of state controlled species to be collected for personal use.

HOLMES, JEFF.

Co-Chair, PARC Joint National Steering Committee, Co-Chair, SE PARC 2003-2007, Senior Field Biologist and Conservation Planner Conservation Southeast, Inc.

Thoughts on PARC's Growth

After a promising start and vigorous growth in the late 1990s, attendance at SE PARC meetings dropped dramatically, bottoming out at all-time low of around 15 people by 2003. Immediately after the 2003 meeting, a small team of motivated leaders began a revitalization effort. Attendance grew rapidly, culminating in a record-setting meeting in early 2007. At this meeting, SE PARC filled a 210-seat auditorium, had to bring in extra seating and, ultimately, had to turn people away because of fire codes.

The key building blocks of SE PARC's growth will be discussed along with their potential applications for other regional working groups and beyond. Additional strategies for future growth will also be described, including PARC's soon-to-be unveiled national Strategic Plan.

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Abstracts - Presentations

JACKSON, TINA.

Herptile Coordinator, 4255 Sinton Road, Colorado Springs, CO 80907, 719-227-5237, Tina.Jackson@state.co.us

The Colorado Division of Wildlife

The Colorado Division of Wildlife has included 9 amphibians and 14 reptiles in the species of greatest conservation need lists of the Colorado Wildlife Action Plan. These numbers represent 60% of the native amphibians and 28% of the native reptiles in the state. I will discuss the various threats and conservation actions addressed in the plan, as well as opportunities for funding and coordination between our state and SW PARC.

JONES, THOMAS R.

Amphibians and Reptiles Program Manager, Nongame Branch, Arizona Game and Fish Department, 2221 West Greenway Road, Phoenix, AZ 85023, 602.789.3735

The Arizona Game and Fish Department, Amphibians and Reptiles Program.

The Arizona Game and Fish Department Nongame Branch is charged with conservation and management of nongame and endangered wildlife, and comprises three faunal programs: Native Fishes and Invertebrates, Birds and Mammals, and Amphibians and Reptiles. The Amphibians and Reptiles Program has a staff of seven, divided administratively among the Program Manager, the Ranid Frogs Project, Desert Turtles Project, and the Amphibians and Reptiles Conservation Planner. The Program works closely with outside cooperators, including other agencies, NGO's, academics and volunteers to implement our conservation goals.

The Ranid Frogs Project targets conservation of seven species of native ranid frogs, all of which are declining, some precipitously. Current emphasis is primarily focused on federally threatened Chiricahua leopard frogs, although considerable effort is placed upon conservation of relict leopard frogs, northern leopard frogs and Tarahumara frogs. The Desert Turtles Project is reorganizing and is expanding to include conservation of ornate box turtles and various aquatic species, in addition to continuing our work with desert tortoises. The Amphibians and Reptiles Conservation Planner's projects emphasize Mexican and narrow-headed gartersnake conservation, and implementation of the Chiricahua leopard frog Safe Harbor Agreement.

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Abstracts - Presentations

LOVICH, KIM.

Curators Department, Zoological Society of San Diego, Post Office Box 120551, San Diego, CA, 92112-0551, klovich@sandiegozoo.org

Southwestern Zoos and Native Reptile and Amphibian Conservation: Taming the Conservation Problems of Native Herps in the Wild West

Much of the herpetological conservation by zoos in the U.S.A has historically excluded native species – tending to focus instead on species from outside their ecological region. In recent time however, there has been measurable effort to become involved in reptile and amphibian conservation with native species. Herein I reviewed the herpetofaunal programs of 54 regional Association of Zoos and Aquariums (AZA) accredited institutions within the Southwestern United States. The majority of Southwestern Zoos already support native reptile and amphibian conservation programs by either financial support or by public displays and education. However, almost ¼ of these institutions have more active participation in cooperative local species reptile and amphibian conservation programs and this number continues to grow annually. The various herpetological programs that these Southwestern zoos are involved in are summarized. Examples of projects that the Zoological Society of San Diego has conducted and our partnerships with other zoos and outside agencies are discussed to illustrate what has worked and not worked. Recommendations on how other zoos and agencies can become involved are offered. As more opportunities for establishing conservation partnerships arise between regional zoos and other institutions, PARC has a role. PARC can become an integral part of each program by helping facilitate conservation through cooperation, and some specific examples and priorities are given.

NANJAPPA MITCHELL, PRIYA.

PARC National State Agencies Coordinator, priya@parcplace.org, pnanjappa@fishwildlife.org, 847.672.9275

SWG and SWP

The State Wildlife Grants (SWG) program is a proactive initiative which provides funding to State Wildlife Agencies for fish and wildlife conservation. Administered by the US Fish and Wildlife Service, these funds are the only (currently) stable form of funding that can directly benefit herpetofauna. All States and Territories recently completed a State Wildlife Action Plan (SWAP), a condition of being granted SWG funds, where they had to evaluate the status of the wildlife in their states, identify threats, and formulate conservation actions. This is particularly important to PARC, as all SWAPs have mentioned amphibians and reptiles as taxa which are poorly studied and in need of additional attention. As a result, the profile of amphibians and reptiles is rising among the State Wildlife Agencies. Some background on the SWG program, the SWAPs, the relationship between State Wildlife Agencies and PARC, and what the SW PARC community can do to help States with the conservation of herpetofauna will be presented.

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Abstracts - Presentations

PAINTER, CHARLES W.

Conservation Services Division, New Mexico Dept. Game and Fish. 1 Wildlife Way, Santa Fe, NM 87507 charles.painter@state.nm.us

Herpetology at New Mexico Department of Game and Fish

Under authority of the New Mexico Wildlife Conservation Act, the NM State Game Commission currently lists 21 species of amphibians and reptiles as threatened or endangered. Habitat loss or modification is the leading cause of this listing, while other factors including disease, direct take, or restricted range also contribute to the listing of species. Federal or State Recovery Plans for 6 of these species have been completed or initiated. As examples, conservation of the Jemez Mountains Salamander, Sand Dune Lizard, and New Mexico Ridgenose Rattlesnake will be discussed briefly. In addition, an argument will be made to recognize the commercial trade in New Mexico, and perhaps the entire desert southwest, as the highest priority threat in the conservation of a small number of species of amphibians and reptiles.

REPP, ROGER A.

President, Tucson Herpetological Society, Instrument Shop Supervisor, National Optical Astronomy Observatory, C/O NOAO, 950 N. Cherry Ave, Tucson, Arizona 85719, 520-318-8210, repp@noao.edu

Herpetology for the Love of it

The field of Herpetology involves a melting pot of many individuals from different walks of life. For some, the interest level is merely keeping herps as pets. Others view Herpetology as a way to get out into the wild country in order to find specific species--"life list Herpetology." Some perceive amphibians and reptiles as watchable wildlife, and go to great lengths to observe rarely-witnessed behaviors. There are also the professionals--hard core researchers, university professors, and zoological curators who earn their paychecks by mastering and staying on the cutting edge of the science.

The formation of the research-based Tucson Herpetological Society (THS) in 1988 set up a situation where common ground exists between professional and amateurs alike. Professional researchers in the Tucson area sometimes rely heavily on the expertise of volunteers from the THS for assistance in their projects. And the rewards of this arrangement are reciprocal in that the volunteers know that their contributions could lead to the inroads of science. The marriage of the passion of Herpetology between professional and amateur alike is the theme of this presentation.

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TITUS, Valorie.

Ph.D. Candidate, Ecology, Binghamton University, Brookhaven National Laboratory, P.O. Box 582, Upton, N.Y. 11973, vtitus7@mac.com, vtitus@bnl.gov, <http://web.mac.com/vtitus7>

NEPARC: an overview of the structure and projects of the Northeast section

Northeast Partners in Amphibian and Reptile Conservation (NEPARC) is a regional working group of PARC. The Northeast region includes: Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Virginia, and West Virginia. NEPARC is managed by two co-chair positions, each serving a two-year term. The co-chairs are responsible for representing NEPARC to national PARC and chairing the Steering Committee and Meeting Planning Committee. Our Regional Steering Committee assists co-chairs with strategic planning and communicating with working groups. The Steering Committee is composed of members representing the various partners (state and federal agencies, academia, and other organizations). The Steering Committee members are elected during our annual meetings. The Meeting Planning Committee is responsible for planning of the annual meetings. NEPARC also has an Editorial Board that is responsible for review and approval of proposed NEPARC products. Working groups submit draft products to the Editorial Board for review. Once a product has been approved, it can be distributed as a NEPARC and/or PARC product. The driving force of NEPARC is the working groups, which are formed to work on specific projects. Past and current groups include Habitat Management Guidelines, Forest Certification, Land Use Guidelines, Box Turtles, Important Herp Areas, State Wildlife Action Plans, and Road Salts.

Abstracts - Posters

GIERMAKOWSKI, J. TOM; HOWARD L. SNELL.

Museum of Southwestern Biology, University of New Mexico, MSC03 2020, Dept. Biology, Albuquerque, NM 87131-0001

Where to look? Maps of likely occurrence and absence for the herps of New Mexico.

The distribution of amphibians and reptiles within New Mexico is well known for some areas and a mystery in others. Past collecting and survey activity has been intensive in the south and central western regions of the state. Numbers of specimens from New Mexican counties vary by nearly three orders of magnitude (78 to 6,100). Because management agencies and research activities increasingly require information about the spatial distribution of biota, we have produced a set of statewide maps representing potential occurrence and absence for 90% of the species of amphibians and reptiles. Combining available machine learning algorithms with current specimen-based locality records and recent remotely sensed and modeled climatic, hydrologic, geologic, and vegetation data, we categorized each square kilometer of New Mexico into four qualitative probabilities of occurrence of reptiles and amphibians. Overlays of these maps with current specimen localities are helping us improve and refine knowledge of the spatial distribution of New Mexico's biotic resources.

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Abstracts - Posters

WALL, MICHAEL J. and MATT GOODE.

Wildlife Conservation and Management, School of Natural Resources, 104 Biological Sciences East, University of Arizona, Tucson, AZ 85721.

Effects of Radiotelemetry on Growth in Tiger Rattlesnakes.

Radiotelemetry has revolutionized the study of secretive animals such as snakes. However, few herpetologists have investigated the possibility that radiotelemetry may have an adverse effect on study animals. Using data from a 10-year study on Tiger Rattlesnakes (*Crotalus tigris*) in Arizona, we determined that snakes implanted with transmitters grew significantly more slowly than snakes without transmitters. However, radiotelemetry did not seem to affect reproduction in females or feeding in either sex. We argue that insights gleaned from radiotelemetry far outweigh possible negative effects. However, negative effects of radiotelemetry may be an important source of error, and should be considered when interpreting research findings.

JONES, LAWRENCE L. C., and ROBERT E. LOVICH.

(LLCJ) Wildlife, Fish, and Rare Plants Program, Coronado National Forest, 300 W Congress, Tucson, AZ 85701; ljones02@fs.fed.us. (REL) Department of Earth and Biological Sciences, Loma Linda University, Loma Linda, CA 92350; rlovich@gmail.com

Lizards of the American Southwest: A Photographic Field Guide.

The American Southwest (defined here as CA, AZ, NV, NM, UT, CO, and Big Bend, TX) has the most diverse lizard fauna in the United States, yet there has been no comprehensive book devoted to lizards of the region since Hobart Smith's Handbook of Lizards, published 60 years ago. We are contributing editors for a new book that will summarize natural history information on all known species and subspecies in the American Southwest. The book will be written by over 40 taxa experts, and will have hundreds of high-resolution color photographs. Photographs will highlight intraspecific variation in lizards, with photographs of juveniles, adults of both sexes, subspecies, and typical color variants, as needed. There will be numerous introductory chapters and appendices, covering many facets of lizard biology, from public lands for lizard-watching to taxonomy, conservation, and management. There will also be chapters covering the Mexican states adjoining the American Southwest, with checklists for each state, including the offshore islands. The book will follow the nomenclature and taxonomy of the Committee on Standard English and Scientific Names of the three primary herpetological societies (currently in preparation).

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Abstracts - Posters

KWIATKOWSKI, MATTHEW A., GORDON W. SCHUETT, ROGER A. REPP, ERIKA M. NOWAK, and B. K. SULLIVAN.

(MAK) Department of Biology, Stephen F. Austin State University, PO Box 13003, Nacogdoches, TX 75962-3003; kwiatkowm@sfasu.edu. (GWS) Department of Biology and Center for Behavioral Neuroscience, Georgia State University, 33 Gilmer Street, SE, Unit 8, Atlanta, Georgia 30303; biogws@langate.gsu.edu. (RAR) National Optical Astronomy Observatory, 950 North Cherry Avenue, Tucson, AZ 85719; repp@noao.edu. (EMK) USGS Southwestern Biological Science Center, Colorado Plateau Research Station, Box 5614, Building 24, Room 109, Northern Arizona University, Flagstaff, AZ 86011; Erika.Nowak@nau.edu. (BKS) Department of Integrated Natural Sciences, Arizona State University at the West Campus, 4701 W. Thunderbird Rd., Glendale AZ 85306; bsullivan@asu.edu.

Spatial Ecology of Urban and Rural Gila Monsters in Central Arizona.

Negative impacts of habitat fragmentation on natural populations are well-documented. One common cause of habitat fragmentation is human encroachment through urbanization, which can be especially problematic for top predators. One such top predator in the Sonoran Desert is the Gila Monster, *Heloderma suspectum*. To investigate the impact of urbanization on the spatial ecology of Gila Monsters, we compared three populations experiencing minimal, moderate, and heavy human encroachment. Because habitat fragmentation often reduces animal movements and home range size, we predicated that movement and home range size would be negatively correlated with levels of human encroachment. However, Gila Monsters exhibited similar spatial ecology in areas of minimal and moderate human encroachment. In those populations, average male home range area, based on minimum convex polygons, was 2 – 3X that of females. In the urbanized population experiencing heavy encroachment, average male home range area was not significantly different from that of females. While home range areas of urbanized males were considerably smaller than those from the other populations, urbanized females had larger home ranges than their rural counterparts, although two outlier urbanized females account for this. These results suggest that some threshold of urbanization negatively impacts Gila Monster movement patterns.

MARTINEZ, HEATHER L.

U.S. Fish and Wildlife Service, Southern Nevada Field Office, Las Vegas, NV 89130; heather_martinez@fws.gov.

Partnering with Private Landowners to Restore Native Amphibian Habitats.

The U.S. Fish and Wildlife Service's Partners for Fish and Wildlife Program provides cost-share funding and technical expertise to private and tribal landowners who want to voluntarily improve wildlife habitat on their lands. The focus of the Partners Program is on projects that benefit wetland, riparian and aquatic habitats that provide habitat for federally listed species, migratory birds, and other sensitive species. The Amargosa toad (*Bufo nelsoni*) is endemic to the Oasis Valley in Nevada where its entire range occurs within the 13 mile long valley. The Partners Program collaborated with the Bureau of Land Management to provide funding for the removal of invasive Russian olive and tamarisk from an 80 acre property along the Amargosa River where toad numbers have been declining. Native willows, ash and cottonwoods were replanted to restore toad habitat. Another Partners project completed in the Humboldt River watershed in central Nevada restored habitat for the Columbia spotted frog (*Rana luteiventris*). This cooperative project resulted in 18 miles of fencing along Susie Creek. Keeping cattle out of the creek has secured important riparian habitat for the Columbia spotted frog and many other species.

SW PARC

First Annual Regional Meeting

Abstracts - Posters

MUTHS, ERIN, CECIL SCHWALBE, AND BRENT SIGAFUS.

(EM) USGS Fort Collins Science Center, 2150 Centre Ave. Bldg C, Fort Collins, CO 80521; muthse@usgs.gov. (CS and BS) USGS Southwest Biological Science Center, Sonoran Desert Research Station, University of Arizona, Tucson, AZ 85721; schwalbec@usgs.gov.

The Amphibian Research and Monitoring Initiative: projects in the southwest.

The Amphibian Research and Monitoring Initiative (ARMI) is an innovative, multidisciplinary program that began in 2000 in response to a congressional directive for the Department of the Interior to address the issue of amphibian declines in the United States. ARMI's formulation was cross-disciplinary, integrating USGS scientists from Biology, Water, and Geography to develop a course of action. The result has been an effective program with diverse, yet complementary, expertise. ARMI's approach to research and monitoring is multi-scale. Detailed investigations focus on a few species at selected local sites throughout the country; monitoring addresses a larger number of species over broader areas (typically National Parks and National Wildlife Refuges); and inventories to document species occurrence are conducted more extensively across the landscape. Where monitoring is conducted, the emphasis is on an ability to draw statistically defensible conclusions about the status of amphibians. To achieve this objective, ARMI has instituted a monitoring response variable that has nationwide applicability. At research sites, ARMI focuses on studying species/environment interactions, determining causes of observed declines, and developing new techniques to sample populations and analyze data. Results from activities at all scales are provided to scientists, land managers, and policy-makers, as appropriate. Four of the seven ARMI regions are represented in SW PARC, (Pacific Northwest [NV, UT], Rocky Mountain [CO, NM], Southwest (CA, AZ), and South Central [TX, OK] regions). We focus on ARMI programs in Colorado and Arizona as examples to highlight the diversity of ARMI activities and the potential for collaborative efforts in studying and monitoring amphibians.

PAINTER, CHARLES W.

Conservation Services Division, NM Dept. Game and Fish, 1 Wildlife Way, Santa Fe, NM 87507.

The Commercial Trade in Amphibians and Reptiles in New Mexico: Is It Sustainable for All Species?

New Mexico Department of Game and Fish (NMDGF) initiated a Commercial Collecting Permit for amphibians and reptiles in 2001 and required that New Mexico residents and non-residents obtain this permit if they receive a profit from the sale of wild-caught, native amphibians and reptiles. During 2001-2007 the collection of ca. 45,991 individuals of 60 species have been reported to NMDGF by 26 collectors who reported between 1 - 21,288 specimens. Waterdogs (larval *Ambystoma tigrinum*) and Collared Lizards (*Crotaphytus collaris*) account for ca. 50.4 % of the total trade. Other species (e.g., *Lampropeltis triangulum*, *Crotalus lepidus*, *Sistrurus catenatus*) are each represented by fewer than 10 individuals reported during the entire 7-year period. The total take of some species (*Bufo debilis* = 4514; *Kinosternon flavescens* = 784) is surprising. Although NM State legislation that authorized the conditions of this permit exempted Rattlesnake Roundups from the commercial trade, data on the total take of Western Diamondback Rattlesnakes (*Crotalus atrox*) at these roundups during 1991 - 2006 is also presented. Data presented likely under-represents the total take of amphibians and reptiles in New Mexico. Research directed at investigating the sustainability of this commercial harvest for select species is needed.

SW PARC

First Annual Regional Meeting

Abstracts - Posters

PAINTER, CHARLES W., LARRY K. KAMEES, AND ANDREW T. HOLYCROSS.

(CWP) Conservation Services Division, NM Dept Game and Fish, 1 Wildlife Way, Santa Fe, NM 87504. (LKK) Wildlife Management Division, NM Dept Game and Fish, 1 Wildlife Way, Santa Fe, NM 87504. (ATH) School of Life Sciences, Arizona State University, Tempe, AZ 85287.

Aspects Of The Ecology Of The Prairie Rattlesnake (*Crotalus viridis viridis*) At Communal Hibernacula In Torrance County, New Mexico 2002-2007.

The Western Rattlesnake, *Crotalus viridis*, is the most widespread and phenotypically variable rattlesnake in North America. Perhaps more than any other rattlesnake, Prairie Rattlesnakes (*C. v. viridis*) are known for hibernating in large aggregations, although few studies have used this species as a model for studying communal denning. Since February 2002 we have monitored ingress and egress of Prairie Rattlesnakes at a large hibernacula in the high-plains yucca grasslands of central New Mexico. The structure of this unique den site allows us full entry into the den and the opportunity to observe hibernating snakes *in situ*. We present data on den site fidelity, recruitment, mortality, patterns of ingress and egress, growth, associated species, and the physiological costs of denning from over 1,400 total captures of *C. v. viridis* over six field seasons.

RAMOTNIK, CINDY A.

U.S. Geological Survey, Fort Collins Science Center, Arid Lands Field Station, University of New Mexico, Albuquerque, NM 87131; ramotnik@usgs.gov or ramotnik@unm.edu.

Effect of wildfire on abundance, detection probability, and arthropod prey base of Sacramento Mountain salamanders (*Aneides hardii*).

On May 11, 2000, a wildfire burned almost 8,000 acres of high-elevation forest in south-central New Mexico, within the range of the Sacramento Mountain salamander, *Aneides hardii*. Although the fire caused an immediate temporary increase in the ability to detect salamanders on severely burned sites, counts of salamanders on those areas declined sharply one year after the fire and have remained low for 5 years. Population estimates were highest on lightly burned sites, intermediate on unburned, and lowest on severely burned sites. Coverboard surveys of salamanders may be preferable over time-constrained searches because the size of the search area is standardized and the relationship to actual population levels is known. Detection probabilities of *Aneides hardii* averaged 19 to 35 percent on burned and unburned sites, and are much higher than those found in eastern plethodontid salamanders. This may reflect the drier, less hospitable, and more open nature of forests in southern New Mexico. Overall effects of the fire on the abundance and community composition of forest floor arthropods appear to be moderate with beetle and spider community composition becoming less diverse and less abundant. Family richness on burned sites has not yet returned to pre-burn levels after 5 years.

SW PARC

First Annual Regional Meeting

Abstracts - Posters

SCHUSTER, SARA L., ELIZABETH A. GALLEGOS, ADAM R. BACKLIN, CHERYL S. BREHME, CINDY J. HITCHCOCK, and ROBERT N. FISHER.

U. S. Geological Survey, Western Ecological Research Center, San Diego Field Station, 4165 Spruance Road, Suite 200 San Diego, CA 92101

USGS Amphibian and Reptile Conservation through Monitoring and Management.

Southern California is a region of unparalleled natural biodiversity but its continued human population growth and expansion threaten many native species and habitats. The U. S. Geological Survey, Western Ecological Research Center, San Diego Field Station collaborates with both private and public agencies dedicated to the conservation of amphibians and reptiles. Our research efforts focus on inventory, monitoring, restoration, and species recovery. We provide data to our partners that can be used to guide management activities. Our current projects include: 1) conducting an inventory of the herpetofauna of southern California, 2) monitoring the effects of urbanization and environmental factors (i.e. wildfires) on the herpetofauna of southern California, 3) spatial and temporal monitoring of the federally endangered arroyo toad (*Bufo californicus*) relative to the effects of climatic changes, urbanization, and non-native species, 4) developing a management plan for the protection and enhancement of aquatic systems focusing on the western spadefoot (*Spea hammondi*) and the western pond turtle (*Emys marmorata*), 5) assessing the anuran communities in Mojave Desert springs focusing on impacts of water quality and quantity, 6) monitoring and implementing recovery actions for the federally endangered mountain yellow-legged frog (*Rana muscosa*) and federally threatened California red-legged frog (*Rana draytonii*).

SJOBORG, JON, POLLY CONRAD, ROSS HALEY, CRISTINA VELEZ and MICHAEL SREDL.

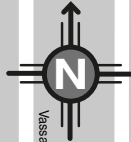
(JS, PC) Nevada Department of Wildlife, 4747 Vegas Drive, Las Vegas NV 89108 USA; (RH) National Park Service, Lake Mead National Recreation Area, 701 Nevada Highway, Boulder City NV 89001 USA; (CV) Public Lands Institute, University of Nevada Reno, 701 Nevada Highway, Boulder City NV 89001 USA; (MS) Arizona Game and Fish Department, 2221 W. Greenway Road, Phoenix AZ 85023 USA.

Development and Implementation of a Rangewide Conservation Program for the Relict Leopard Frog, *Rana onca*

The relict leopard frog, *Rana onca* Cope, was considered extinct until its rediscovery at several locations within the Lake Mead National Recreation Area, Nevada, USA, beginning in 1991. A total of seven populations were identified, six within Lake Mead NRA and one in Mohave County, Arizona, but two are now extirpated, and the global population of this species was thought to number fewer than 1100 individuals in 2000. Conservation efforts for this species are complicated by its historic distribution encompassing trans-boundary areas of three US states, multiple jurisdictional regions of Federal management agencies, and a unit of the National Park Service. Coordinated conservation actions were initiated in 2001 with formation of the Relict Leopard Frog Conservation Team and a comprehensive Conservation Agreement and Strategy was completed in fall 2005. Concurrent with conservation strategy development, RLFCT partners have successfully implemented captive breeding and head-start programs, established four additional populations in the wild, completed critical life history research activities, and developed a cooperative field monitoring program. Current efforts are focused on management of existing wild and experimental populations, and on developing additional viable populations of the frog within historic range outside of Lake Mead NRA.

The University of New Mexico

General Campus Map for Visitors



South Campus
to South Golf Course

341, 339, 332, 331, 337, 333, 338, 317-329, 301, 307, 308, 311, 311A, 302, 312, 300

Student Family Housing
Isotopes Park
"The Pit"

Avenida De Cesar Chavez
Zia Lot
South Lot

Elks - Recycling
Political Archives
Continuing Education

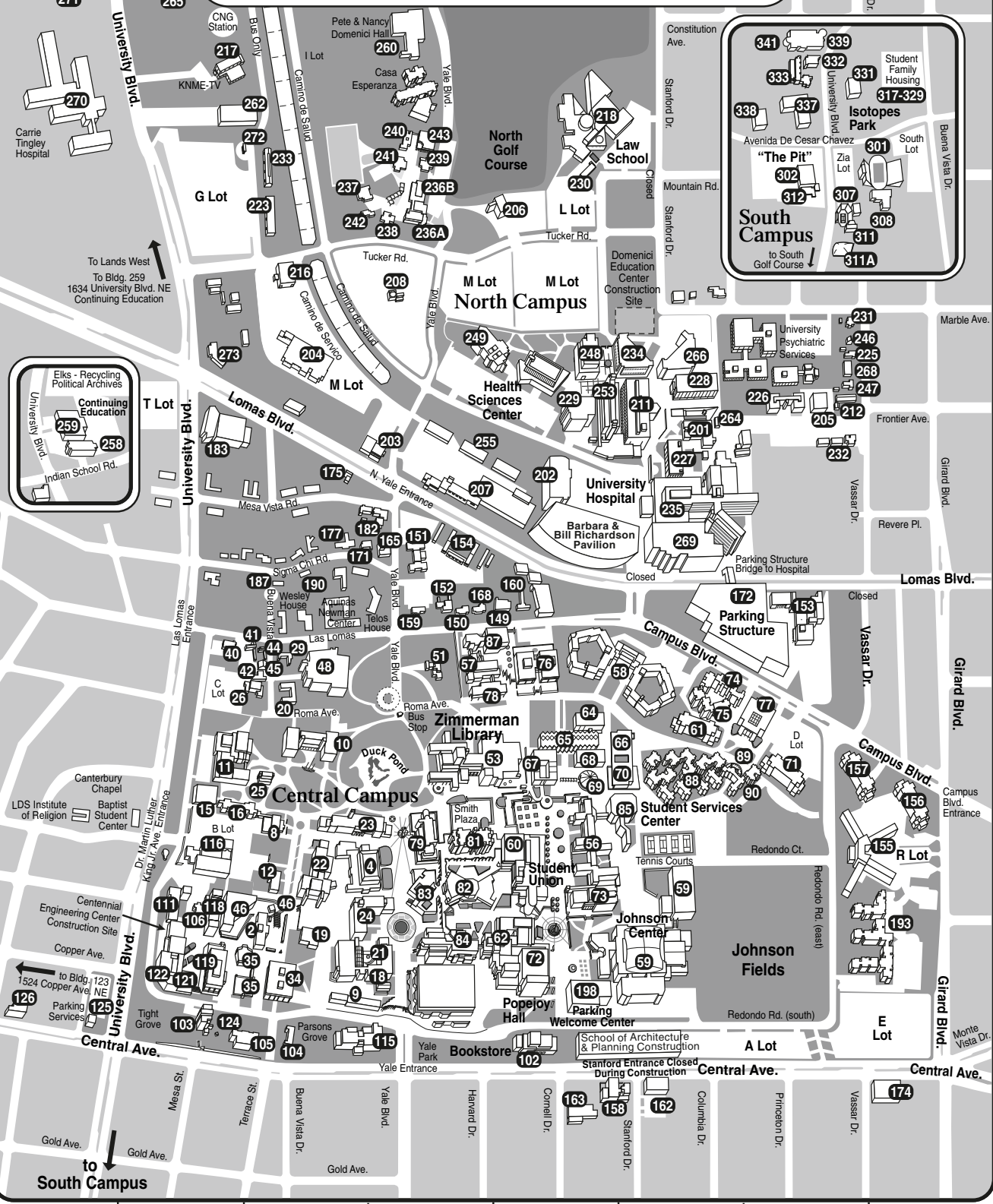
259, 258

University Blvd.
Indian School Rd.

to Bldg. 259
to Lands West Lot
Camino de Salud

277, 277, 271, 265, 270

Carrie Tingley Hospital



The University of New Mexico Alphabetical List of Campus Buildings

Note: Some buildings may be listed here under several names or have more than one function. Building number shown in boldface, but not all numbered buildings appear in this list.

Building Name (Alternative) (Building #).....Location

Administration Building (Scholes Hall) (10)	G-3
Admissions (85)	H-6
Aerospace Studies (159)	F-4
African American Studies (56)	H-5
Alvarado Hall (157)	G-7
Alumni Memorial Chapel (25)	G-3
Alumni (103)	I-2
Ambulatory Care Center (269)	F-6
Anderson, School of Management (76)	F-G-5
Anderson, Graduate School of Management & Parish Memorial Library (87)	F-4-5
Anthropology (11)	G-2
Anthropology Annex (12)	H-3
Archeology (Office of Contract Archeology) (273)	D-2
Architecture and Planning (158)	J-5-6
Architecture and Planning Annex (162)	J-6
Army ROTC (175)	E-3
Art (84)	I-4
Art Annex (105)	I-2-3
Art Museum (72)	H-5
Art Education (Masley Hall) (68)	G-5
Art & Technology Center (83)	F-5
Arts of the Americas (40)	F-2
Athletics Offices (307)	Inset C-7
Automotive (216)	D-3
Bandelier Hall East (8)	H-2
Bandelier Hall West (16)	H-1-2
Barbara and Bill Richardson Pavilion (under construction) (224)	F-5
Basic Medical Sciences (211)	E-6
Basketball Training Facility (Rudy Davalos) (312)	Inset, C-7
Biology (Castetter Hall) (21)	I-3-4
Biology Annex (19)	I-3
Biomedical Research (253)	E-5
Bookstore (102)	I-5
Bratton Hall (Law School) (218)	B-C-5
Bureau of Business and Economic Research / Data Bank (168)	F-4
Campus Safety (Occupational Safety) (233)	C-3
Cancer Research Center (227, 229)	E-5
Carlisle Gymnasium (4)	H-4
Carrie Tingley Hospital (270)	B-1
Castetter Hall (Biology) (21)	I-4
Centennial Science & Engineering Library (46)	H-3
Center for High Tech Materials (CHTM) (338)	Inset B-7
Center for the Arts & Fine Arts Library Art Museum (62)	H-5
CERIA (Center for Environmental Research, Informatics & Art) (83)	H-4
Chemical & Nuclear Engineering Laboratory (111)	H-2
Chemistry (Clark Hall) (22)	H-3
Children's Campus & Manzanita Education Center (277)	A-2
Children's Psychiatric Center (236-243)	C-3-4
Civil Engineering (Tapy Hall) (118)	H-2
Civil Engineering Research Laboratory (106)	H-2
Clark Hall (Chemistry) (22)	H-3
Communications (Journalism) (115)	I-4
Communications Network Dept (Telecommunications) (255)	E-4
Continuing Education (North Bldg.) (259)	Inset, D-1
Continuing Education (South Bldg.) (285)	Inset, D-1
Coronado Hall (155)	H-8
Counseling & Family Studies (Simpson Hall) (66)	G-6
Crystal Growth Facility (331)	Inset, B-7
Dane Smith Hall (48) (331)	F-3
DeVargas Hall (75)	G-6
Dental Programs (Novitski Hall) (249)	D-4-5
Diabetes Control and Complications (264)	E-6
Dispute Resolution (44)	F-3
Division of Government Research (154)	F-4
Domenici Education Center	D-6
Domenici Hall (MIND) (260)	B-4
Earth & Planetary Sciences (Northrop Hall) (24)	H-4
Economics (57)	G-4
Education Administration (Travelstead Hall) (65)	G-5
Education Classrooms (67)	G-5
Education Offices (58, 70)	G-5
Electrical & Computer Engineering/Centennial Library(46)	H-2
Engineering and Science Computer Pod (2)	H-2
Equal Opportunity Programs (42)	G-4
Extended University (1800 Sigma Chi NE) (187)	F-2
Faculty Club (160)	F-5
Family Health: University Clinic & Pharmacy (271)	A-1
Family Practice Center (248)	D-5
Farris Engineering Center (119)	I-2
Fine Arts Center (Music, Drama & Museum) (62)	H-5
Fine Arts Library (62)	H-5
Ford Utilities Center (116)	H-2
Health, Physical Education and Recreation (Johnson Center) (59)	H-6
Health Sciences and Services (266)	D-6
Health Sciences Learning Resource Center (See Medical Center Library) (234)	D-6
Hibben Center for Archeology Research (15)	G-2
Hodgin Hall (103)	I-2
Hokona Hall Zia Wing - Residences Zuni Wing Offices (58)	G-5
Hospital Patient Parking (172)	F-6-7
Human Resources (Administration) (26)	G-2
Human Resources Service Center (Employment & Benefits) (183)	E-2
Humanities (81)	H-4
Indoor Tennis Dome (311A)	Inset, C-7
Information Technology Services (formerly CIRT) (153)	F-7
Johnson Center (59)	H-6
Jonson Gallery (152)	F-4

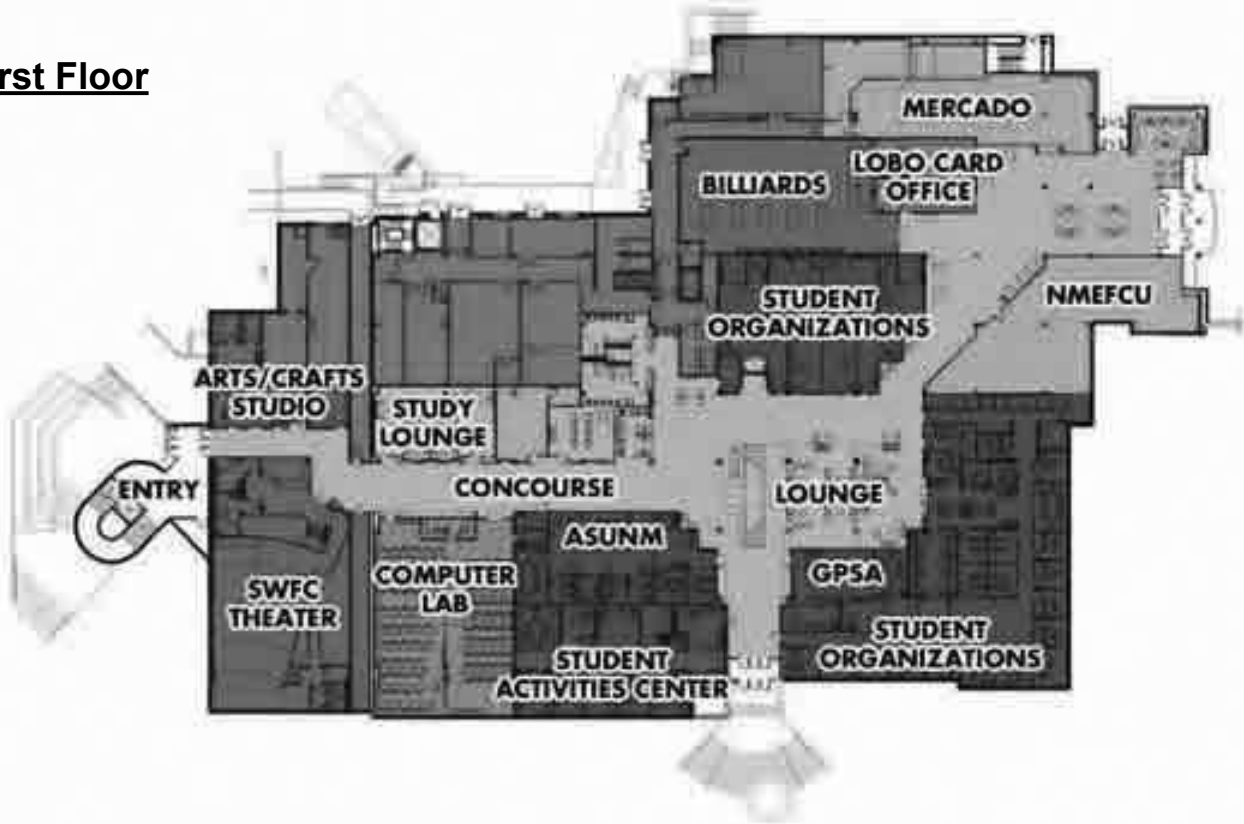
Building Name (Alternative) (Building #).....Location

Kiva Lecture Hall (69)	G-5
KNME-TV (217 / 265)	B-2
Laguna Hall (74)	G-6
La Posada Dining Hall (77)	G-6
Latin American Institute (165, 182)	F-4
Law School/Law Library (Bratton Hall) (218)	B-C-5
Logan Hall (Psychology) (34)	I-3
Lomas Parking Structure (172)	F-6-7
Manufacturing Technology & Training Center (341)	Inset, B-7
Manzanita Hall (70)	G-6
Marron Hall (9)	I-3
Masley Hall (Art Education) (68)	G-5
Mattox Sculpture Center (123)	I-1
Maxwell Museum (in Anthropology) (11)	G-2
Mechanical Engineering (122)	I-2
Media Technology Services (in Woodward Hall) (82)	H-4
Medical Center Library (234)	D-6
Mesa Vista Hall (56)	H-5
Meteoritics (Northrop Hall) (24)	H-4
MIND Institute (Mental Illness and Neuroscience Discovery) (260)	B-4
Mitchell Hall (Classrooms) (23)	H-3
Native American Studies (56)	H-5
Naval Science (151)	F-4
New Mexico Children's Psychiatric Center (236-243)	C-3-4
Nursing/Pharmacy (228)	D-6
Northrop Hall (Geology) (24)	H-4
Novitski Hall (Dental Programs) (249)	D-4-5
Nuclear Engineering Laboratory (121)	I-2
Nursing/Pharmacy (228)	D-6
Observatory (208)	D-4
Office of Capital Projects (203)	E-4
Onate Hall (156)	G-H-8
Ortega Hall (79)	H-4
Outpatient Surgery and Imaging (OSIS) (283)	A-1
Parish Library (87)	F-4
Payroll (183)	E-2
Pharmacy (Nursing/Pharmacy) (228)	D-6
Physical Plant Dept. (Service Building) (204)	D-3
Physician Assistant Program (226)	E-7
Physics (Regener Hall) (35)	I-3
Physics & Astronomy (207)	E-4-5
"The Pit" (University Basketball Arena) (302)	Inset, C-7
Police Administration (58)	F-5-6
Popejoy Hall (72)	I-5
Postal Services (262)	B-2
President's Home (University House) (51)	G-4
Psychology (Logan Hall) (34)	I-3
Psychology Clinic (44)	F-3
Purchasing (183)	E-2
Real Estate (41)	D-3
Records Management (262)	B-2
Recruitment Services (60)	H-5
Redondo Village Apartments (193)	H-7
Regener Hall (Physics) (35)	I-3
Research Incubator Building (RIB) (205)	E-7
Risk, Safety, Health and Environmental Affairs (RSHEA) (223, 233)	C-3
Rotunda at Science & Technology Park, 801 University Blvd. SE (339)	Inset, B-7
Santa Ana Hall (71)	G-7
Santa Clara Hall (61)	G-6
Sara Reynolds Hall (Classroom Building) (104)	I-3
Scholes Hall (Administration Building) (10)	G-3
Science & Technology at UNM (332)	Inset, B-7
Simpson Hall (Counseling and Family Studies) (66)	G-6
Social Sciences (78)	G-4
Southwest Hispanic Research Institute and Chicano Studies (171)	F-3
Special Programs (149)	F-4
Speech and Hearing (183A)	E-7
Stadium (Football, Track and Field Facilities) (301)	Inset, C-8
Student Family Housing (317-329)	Inset, B-8
Student Health Center (73)	H-5
Student Residence Center and Commons Building (88, 89 and 90)	G-6
Student Services Center (85)	H-6
Student Support Services (Deaf and Hard of Hearing) (150)	F-4
SUB (Student Union Building) (60)	H-5
Surge Building (226)	E-7
Surplus Property (Elks)	Inset, E-1
Swimming Pools (See Johnson Center) (59)	H-6
Tamarin Institute (163)	J-5
Tapy Hall (Civil Engineering) (118)	H-2
Technology and Education Center (64)	E-4
Testing Center (Woodward) (82)	H-4
Tow Diehm Athletic Facility (308)	Inset, C-8
Travelstead Hall (Educational Administration) (65)	G-5
University Arena (Basketball Arena, "The Pit") (302)	Inset, C-7
University Business Center (183)	E-2
University College (73)	H-5
University Communication and Marketing (103, 198)	I-2, I-5
University House (President's Residence) (51)	G-4
University of New Mexico Hospitals (235)	E-6
University Psychiatric Services (212, 225, 231, 246, 247, 268)	D-6-7
UNM/SNL Advanced Materials Laboratory at Science & Technology Park (337)	Inset, B-7
Visitor Parking Structure & Welcome Center (198)	I-5
Welcome Center/University Communication and Marketing (198)	I-5
Woodward Hall (Classrooms and Media Technology services) (82)	H-4
Zimmerman Library (53)	G-5

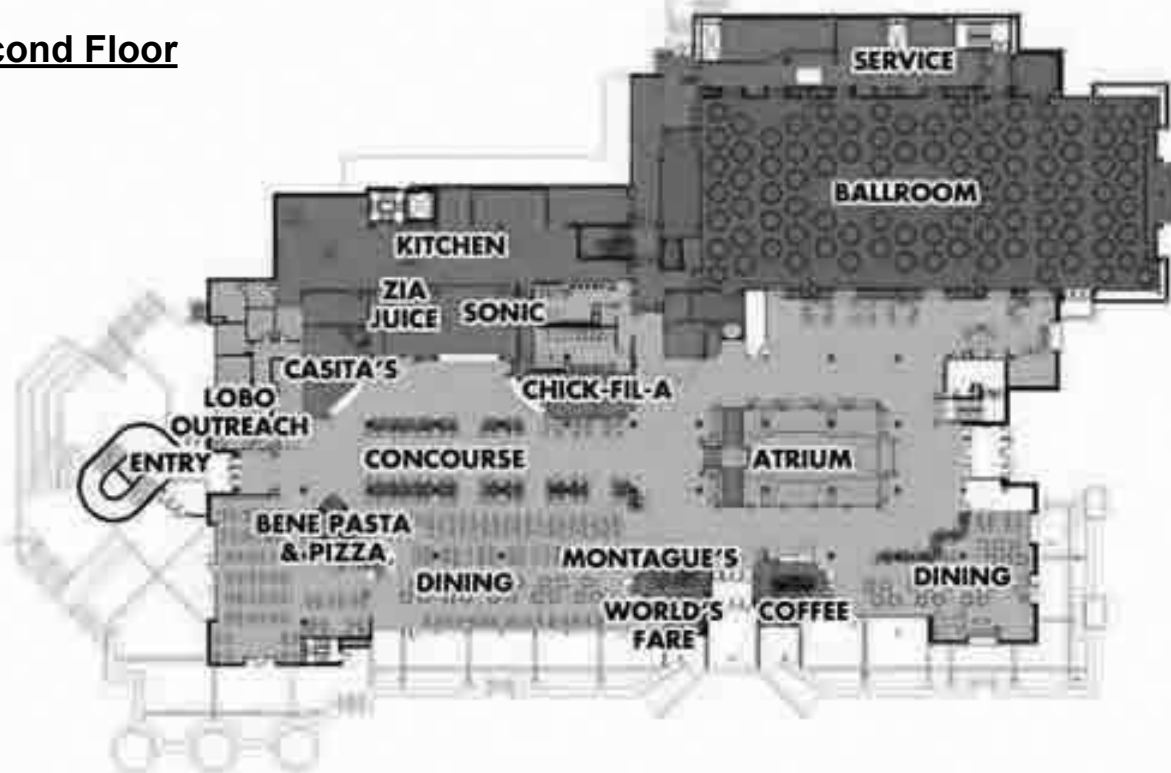
The University of New Mexico

Student Union

First Floor



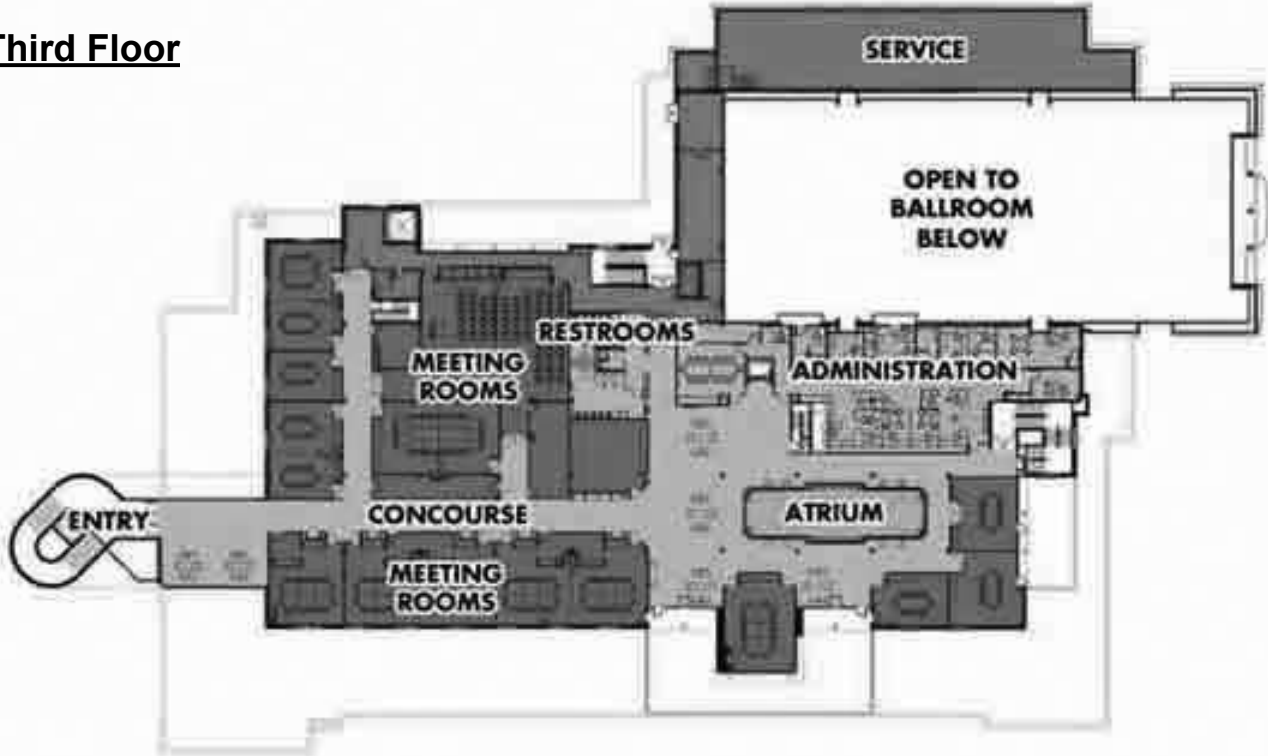
Second Floor



The University of New Mexico

Student Union

Third Floor



Third Floor - Meeting Rooms

