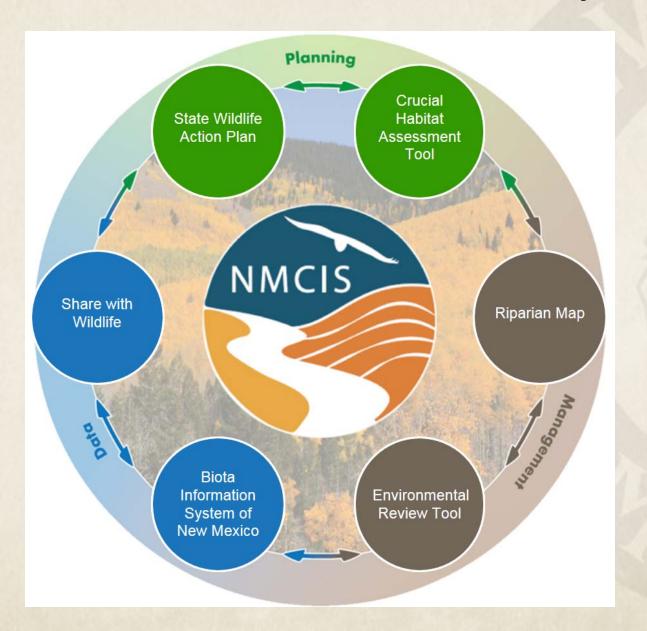
Conservation Information System



Overview

- Ecological and Environmental Planning Division (EEP) has developed and/or maintains 4 conservation-related tools, 1 statewide dataset, and 1 grant program
- > These tools, dataset, and program are all interconnected
- Several inform infrastructure and other project reviews performed by EEP staff
- The Conservation Information System (CIS) was developed to help people find the Department's publicly-available information relevant to conserving New Mexico's fauna and flora

Natural Heritage New Mexico

- Natural Heritage serves decision makers and members of the public in New Mexico by acquiring and distributing biodiversity conservation information
- Every state has a Natural Heritage program
- Some are housed in state wildlife agencies
- New Mexico's Natural Heritage program is a division of the Museum of Southwestern Biology at the University of New Mexico
- Important partner on 5 of the 6 CIS components



Key CIS Components: Timeline



http://www.wildlife.state.nm.us/conservation/

Key CIS Components: Acronyms



http://www.wildlife.state.nm.us/conservation/

Share with Wildlife

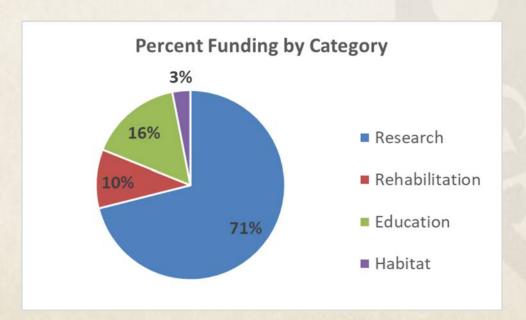
- Grant program funds wildlife habitat enhancement, research, education, and rehabilitation projects
- Supported by voluntary contributions
- Focus on species without funding from other sources
- Since 2005, research and habitat projects focused on Species of Greatest Conservation Need
- Connections: Informs BISON-M, SWAP revision





Share with Wildlife: Past Decade

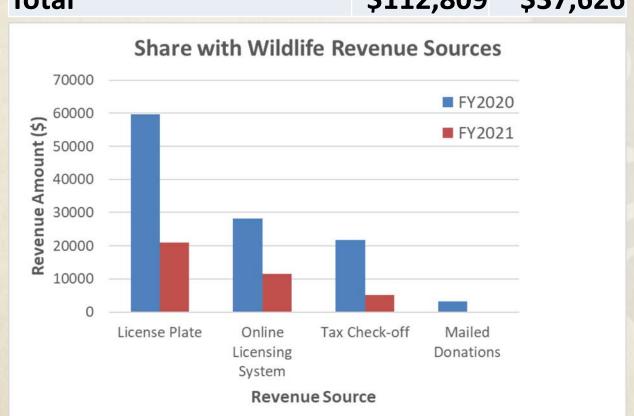
- Funded 98 projects focused on >65 species
- > Average 15 projects per year (up to 24)
- > ~\$1.9 million dispersed via contracts and other agreements to ~55 different project leads





Share with Wildlife: Recent Revenue

Source	FY2020	FY2021
License Plate	\$59,600	\$21,042
Online Licensing System	\$28,110	\$11,434
Tax Check-off	\$21,811	\$5,100
Mailed Donations	\$3,288	\$50
Total	\$112,809	\$37,626





Share with Wildlife: Webpage

Share with Wildlife 1981

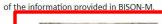


Share with Wildlife is a New Mexico Department of Game and Fish program initiated in 1981 that depends on tax-deductible donations from the public. Its mission is to help those species that do not receive funding from any other source. The program funds four categories of wildlife projects: research, education, habitat enhancement, and rehabilitation. It receives much of its funding through the state income tax check-off program. It is also supported through Share with Wildlife license plate sales and direct donations. Matching federal funds maximize the program's support of New Mexico's wildlife. (Video still: Broad-billed hummingbird artwork above by Hira Walker).

BISON-M

- Web-enabled database
- Over 6,800 species accounts
- Accounts contain information on species distribution, biology, ecology, and a list of references
- Connections: Search for SwW contracts; informs SWAP revision and NMERT reports; links to NMERT

Welcome to the Biota Information System of New Mexico (BISON-M). BISON-M was developed by New Mexico Department of Game and Fish and numerous partners. BISON-M contains species accounts for all vertebrate and many invertebrate species of wildlife that occur in New Mexico. New information is continuously being added and errors do occur. Users are encouraged to refer to the original cited source to assess the completeness, correctness, and currency





Species Search



County Reports



Document Search



Biota Information System of

New Mexico

https://bison-m.org/Index.aspx

BISON-M: Species Search



SPECIES SIMPLE SEARCH	BISON-I	Check box to include field in search results. Click Θ to show additional, related search terms.			
TAXONOMY	DISTRIBUTION	HABITAT	Search	Print	
Common Name least shrew	State 🔻 🗆	General 💌 🗆	Clear	PDF Excel	
Scientific Name	● NM County	⊕ Macrogroup	Legal Status Report	● PDF ○ Excel	
Latin Taxon	Arizona County	Land Use/Cover			
ALL O Vertebrates O Invertebrates	Accident County	Ecoregions	LIFE HI	And the control of th	
Category	Historic County	⊕ National Wetlands	Codes	<u> </u>	
Account Type	Watershed (Huce)		① Interaction Type	<u>•</u> 0	
Photo ALL Oyes ONo		FOOD HABITS	① Disease	M -	
OAL OIG OIG		Trophic	MANAGEMENT PRACTICES		
LEGAL STATUS Legal Status	Mountain Range	① Life Stage	⊕ Effects	× □	
Trends/Threats	ENVIRONMENTAL ASSOCIATION Usew Search Summary Life Stage		COMMENT SEARCH		
Species Refine Search	Hide Category Sun	nmary O Show Category Summary			
ID Common Name		Scientific Name	<u>Habitat</u>	Documents Photo	
050705 Least Shrew	Cryptotis parvus			View List	

BISON-M: Species Booklet

Print Booklet



Disclaimer Policy

Booklet updated 3/29/2019. Questions? Updates? Click here to let us know. Tip: Expand All Sections and Use Ctrl-F to search for text in booklet. Check to Show All Sections: Click Blue Section Head to Show/Hide Details Jump to Section: Summary Click for More Images >> 1 2 050705 Species ID Name Least Shrew Cryptotis Genus Species Musarana Chica (Hispanic); North American least shrew Synonyms Category 05 Mammals . State NM: Species of Greatest Conservation Need (SGCN) **Legal Status** · State NM: Threatened **Species Distribution** · CO: Species occurs(ed) Click to search Google for images of this species NM: Extant · OK: Species occurs(ed) · TX: Species occurs(ed) **Habitat Association** LOWLANDS, RIPARIAN, TERRESTRIAL **Food Habits** · INVERTIVORE-eats invertebrates · SCAVENGER-feeds on carrion & refuse **Taxonomy** (last updated 3/29/2019) Legal Status (last updated 4/26/2019) Species Distribution (last updated 5/22/2019) (last updated 4/29/2019) **Habitat Association** (last updated 6/2/2020) **Food Habits Environmental Associations** (last updated 4/26/2019) Life History (last updated 4/29/2019) (last updated 4/26/2019) **Management Practices** References

Least Shrew

BISON-M: Contract Search



					BISON-IVI Contract	Search			
Contract Title (any part) Contract Year Contract Type(s) Contractor (any part) Contract Amount	2011 to Wildlife Research to	×	4	RELATED DOI Citation (any part) Year Document Type(s) Species (Simple Search) Legal Status Abstract (any part) Author(s)	to v	Topic(s) County(ies) Ecological Level(s) Geographic Level(s) Region(s) Watersheds (HUC8) USGS Quadrangle(s)			Search Clear Print Excel
37 Contracts					1				
	ct Title	Year	Туре		<u>Contractor</u>		Amt	%Fed	<u>Documents</u>
263 Iron Creek woodlandsr		2011	Wildlife Research	Christin T. Slaughter and Kenneth G. Boykin, New N			\$11,265	50%	· Slaughter and Boykin, 2011. Genetic Analysis an
264 Analysis of roost micro hibernacula across Ner	climate in nine bat	2011	Wildlife Research	Debbie Buecher, Buecher Biological Consulting			\$4,600	50%	· Buecher, D., 2011. Status of roost microclimate
265 The Breeding Biology	of the Black-throated	2011	Wildlife Research	Rio Grande Bird Research			\$5,250	50%	· Rio Grande Bird Research. 2011. The Breeding Bi

Gray Warbler (Setophaga nigrescens) in the Manzanita Mountains of New Mexico 2011 266 Ouivira Coalition: Resilience for Rio Grande 2011 Wildlife Research Michael Bain, Ouivira Coalition \$7,500 Bain, M. 2011, Ouivira Coalition: Resilience fo... Cutthroats 267 Cool Season Activity of the Meadow Jumping 2011 Wildlife Research Greg D. Wright and Jennifer K. Frey, New Mexico State University \$14,571 Wright, G. and Frey, J. 2010. Cool season activ... Mouse in the Middle Rio Grande Wright, G. and Frey, J. 2011.Cool/Winter activi. 268 Development of non-invasive monitoring \$14,000 · Frey, J. 2011. Development of non-invasive moni... 2011 Wildlife Research Jennifer Frey, Frey Biological Research 50% protocols for the Organ Mountains chipmunk 269 Evaluation of Great Plains Narrowmouth Toad 2011 Wildlife Research Jennifer B. Horn, Texas Tech University \$11,503 Griffis-Kyle, K. 2011. Evaluation of Great Plai.. Habitat in Northeastern New Mexico 2011 271 Dunes Sagebrush Lizard Surveys on NMDGF 2011 Wildlife Research \$8,170 · Hill, M.2011. Dunes sagebrush lizard (Sceloporu... Lesser Prairie Chicken Conservation Areas 274 Dry and Wet Season Habitat Use of the Wildlife Research Randy Jennings and Bruce Christman, Western New Mexico University \$13,000 Jennings, R., and B. Christman. 2011. Dry and W... Narrow-headed Gartersnake, Thamnophis rufipunctatus, in Southwestern NM 275 Fall 2010 Raptor Migration Studies in the Wildlife Research HawkWatch International, Inc. Mika, M., and M. Neal. 2010. Study of raptor m... \$5,000 Manzano Mountains of Central New Mexico 277 Baseline genetic studies of fishes native to the 2011 Wildlife Research Tyler Pilger and Thomas Turner, University of New Mexico Pilger, T., and T. Turner. 2011. Baseline genet... \$11,000 Gila River Basin 279 Genetic Study of the Sacramento Mountains Ryan, R., and B. Milligan. 2011. Genetic study ... Wildlife Research Dr. Brook Milligan, New Mexico State University \$23,200 Checkerspot Butterfly 280 Conservation Assessment of Ochlodes yuma 2011 Wildlife Research Steven 1, Cary, Natural Resource Institute \$9,500 anasazi, Yuma Skipper Butterfly 291 Investigations into captive propagation of Wildlife Research David L. Rogowski, Texas Tech University \$8,000 Rogowski, D. 2011. Investigation into captive p... springsnails (Pyrgulopsis roswellensis and Juturnia kosteri) from New Mexico 2011 Wildlife Research 294 Evaluating the potential extinction of selected 2011 Tom Giermakowski and Howard Snell, University of New Mexico \$8,000 · Snell, H., and T. Giermakowski. 2011. Evaluatin...

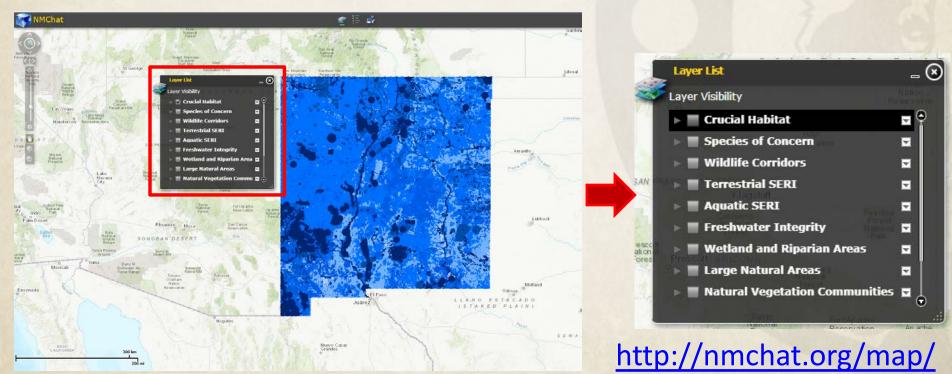
https://bison-m.org/ContractSearch.aspx

Crucial Habitat Assessment Tool

Presents a consistent map of wildlife habitat across the West



- Informs project planning at the landscape scale
- Connections: Used in development of Conservation Opportunity Areas in the SWAP; data layers in NMERT

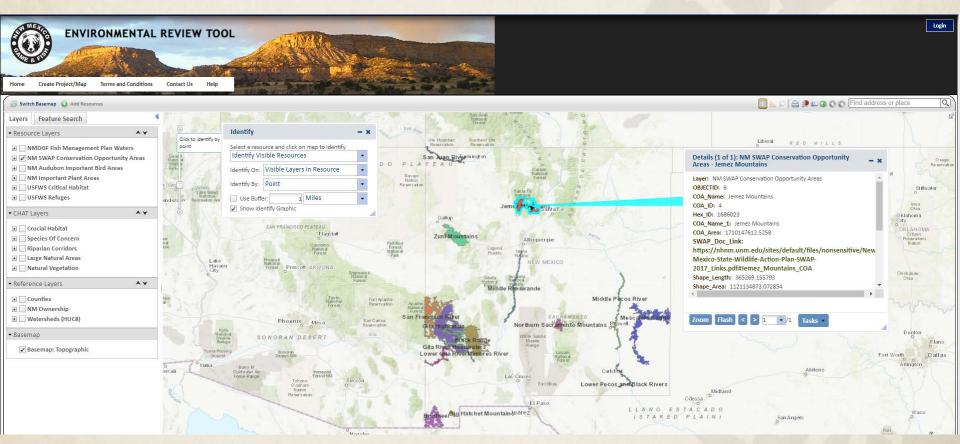


Environmental Review Tool

- Environmental Review Tool 2018
- Website for proponents to enter details on proposed projects and initiate EEP review
- NMERT generates a species list and initial set of recommendations
- ➤ If needed, EEP staff evaluate species potentially impacted by proposed project and provide guidelines to avoid or mitigate species impacts
- Connections: Species lists link to BISON-M; display of CHAT, NMRipMap, and SWAP data layers

NMERT: Base map

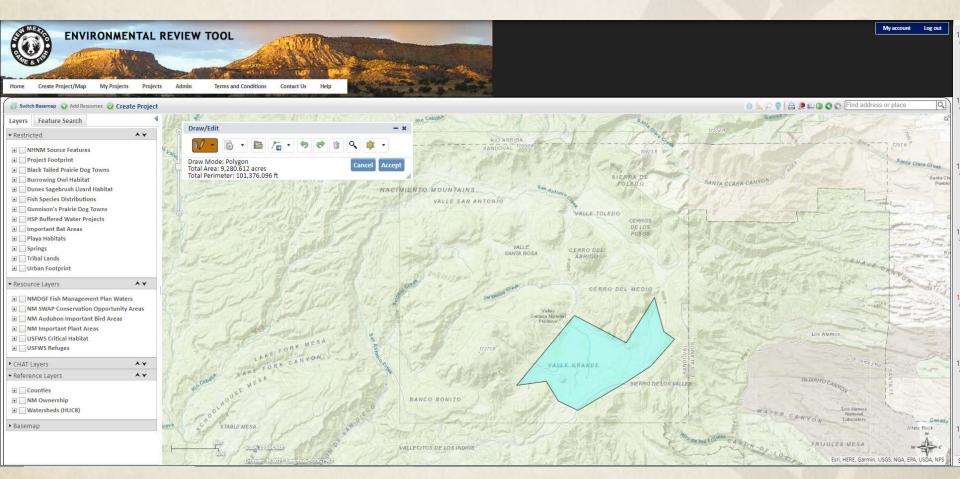




https://nmert.org/content/map

NMERT: Project Data Entry



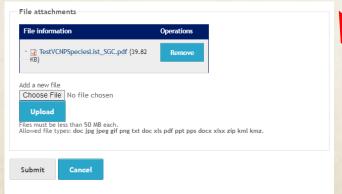


https://nmert.org/content/map

NMERT: Project Data Entry



Create Project	- ×	Create Project
Fields marked with red asterisks are required fields. Project Title * Enter a descriptive and brief title for this project. Test Species List Valles Caldera National Preserve User Project Number(s) Organization-specific project number(s) for user tracking purposes (optional) Project Type * Select only one Project Type per project (NO PROJECT REVIEW) SPECIES LIST ONLY 401/404 PERMITS AIR QUALITY ANIMAL DAMAGE BORDER SECURITY ACTIVITIES COMMUNICATIONS COMMUNICATIONS COMMUNICATIONS	- x	Project Description * Include detailed information about your project, such as timing of activities, equipment and/or materials us extent of ground disturbance, and wildlife surveys or mitigation that have been built in to the project. Furt details and photos can also be uploaded as file attachments. Test species list Valles Caldera National Preserve. Project Organization Select if submitting this project for another organization (optional). None - User Agency Type * Please select the agency that best describes your organization. NM DEPARMENT OF GAME AND FISH On Behalf Of User Optional. Start typing and select the user from the dropdown only. Contact Name * Virginia Seamster Organization * New Mexico Department of Game and Fish
○ CONSERVATION EASEMENT		New Mexico Department of Game and Fish Email *
 ○ DAM MAINTENANCE ○ DECISION SUPPORT SYSTEM 		virginia.seamster@state.nm.us





https://nmert.org/content/map

NMERT: Project Report



New Mexico Department of Game and Fish Project ID: NMERT-865

Special Status Animal Species within 2000 Meters of Project Area



ESA = Endangered Species Act, WCA = Wildlife Conservation Act, SGCN = Species of Greatest Conservation Need, SERI = Species of Economic and Recreational Importance



SWAP Website

User-friendly access to a comprehensive conservation plan for New Mexico



- Identifies Species of Greatest Conservation Need (SGCN), habitats, threats, and conservation actions
- Qualifies the Department to apply for State Wildlife Grant funds from U.S. Fish and Wildlife Service
- Connections: Links to BISON-M species accounts; informs SwW project proposal development

SWAP Website: Home Page





New Mexico Conservation Information System

BISON-M NMERT NM CHAT

SWAP

Share with Wildlife

New Mexico State Wildlife Action Plan



https://nmswap.org/

SWAP Website: Information Pathway

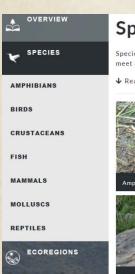




https://nmswap.org/

SWAP Website: SGCN Search







Species considered for inclusion as Species of Greatest Conservation Need (SGCN) had to occur within the state (www.bison-m.org/) and meet at least one of the following conditions:

◆ Read More









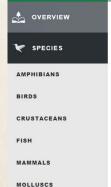














Mexican Gartersnake











https://nmswap.org/species

SWAP Website: SGCN Page

State Wildlife Action Plan 2020

Western River Cooter



Name Western River Cooter
Scientific Name Pseudemys gorzugi
Category I
Taxon Reptiles

Western River Cooter (Pseudemys gorzugi) is a small (up to 24 cm carapace length) freshwater turtle that occurs in the Rio Grande and Pecos River drainages from New Mexico to Texas and northeastern Mexico. They have recently been detected at several sites along the Black River in southeastern New Mexico. They are often found basking on logs, muddy banks, and overhanging vegetation.

Ecoregions







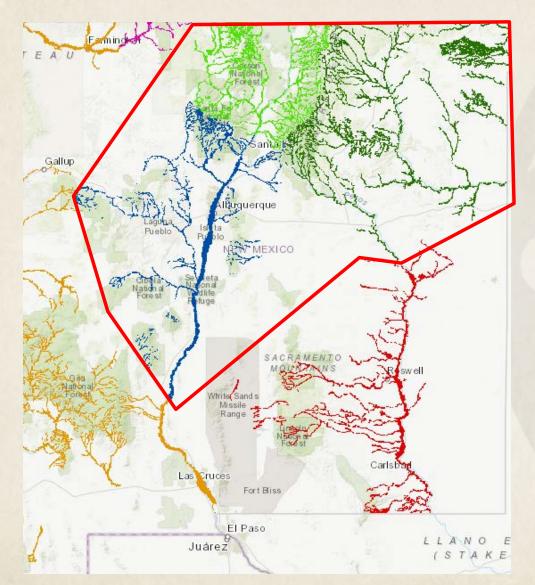
Riparian Map

Riparian Map Ongoing

- Statewide dataset (3 of 6 project areas completed)
- Provides enhanced detail on plant community structure and composition of riparian habitats
- Can inform riparian restoration project planning and technical reviews of projects that may impact riparian areas
- Connections: Addresses key habitat from the SWAP; data displayed in NMERT; can inform SwW project proposal development

NMRipMap: Riparian Corridor

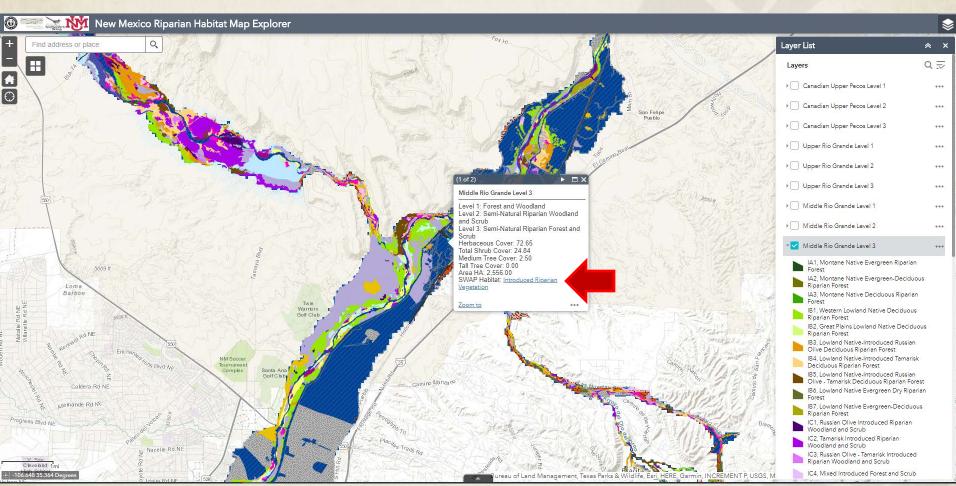




https://nhnm.unm.edu/riparian/nmripmap

NMRipMap: Community Detail





LIVE DEMO BISON-M SWAP

Questions?

