



# CONSERVANCY CONNECTION



Winter 2016





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Executive Director

**Tanya Henderson**  
Stewardship Program Manager

**Julie Vargo**  
Finance and Outreach Coordinator

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# (re)Introducing Ourselves

## Letter from the Amargosa Conservancy Executive Director

Welcome to the inaugural issue of *Conservancy Connection*, our newly redesigned and revamped newsletter!

Dear Friends,

I'm pleased to introduce myself as Patrick Donnelly, Executive Director of Amargosa Conservancy and resident of Shoshone, California. I've been a desert rat for years, and have a background in habitat restoration and federal land use policy. My two little dogs and I love tromping around the muddy banks of the Amargosa in the beautiful Shoshone Wetlands each morning; and each month I make a pilgrimage to the top of Eagle Mountain, a nearby craggy limestone peak.

Over the past year, I've been privileged to be part of a renaissance at the Amargosa Conservancy. The chief driver of this revival has been the amazing people involved. Our Board of Directors has expanded to include nine remarkable individuals- retired land managers, water policy experts, invasive species eradicators, social justice activists, and devoted community members just to name a few. Their direction and vision have allowed our staff to create and implement new programming which is transforming the conservation community in the Amargosa Basin.

We've also recently added two staff members: Tanya Henderson and Julie Vargo. Tanya comes to us with a background in habitat restoration and community engagement. She is spearheading our many stewardship projects and supervising our interns who are getting the work done. Julie is revamping and streamlining our financial and membership systems, ensuring the efficient use of our resources and keeping us in close touch with the people who make our work possible - you, our members!

Our work is fundamentally grounded in two things: the incredible ecosystems of the Amargosa Basin and Eastern Mojave Desert, and the community of people that live in or just love these special areas. We are thankful to you for your interest in our work, and encourage you to get involved.

Come for a visit, volunteer at a stewardship event, sign a petition, or just spread the word about our work.

**Join us.**

Sincerely,

Patrick Donnelly



**Patrick Donnelly**  
Executive Director

## Conservancy's Stewardship Field Season going strong

**T**he Conservancy office has been buzzing with activity over the last few months. In addition to our new staff members, we have three full-time interns. They have proven to be great additions to our team with their energy and enthusiasm for learning and working in our special desert ecosystem.

Abby and Anne are working on field projects such as tamarisk removal, vole habitat development, and niterwort monitoring. They get to play in the salt and mud, seeing immediate results of their labor

where bulrush is growing, cattails are cleared, and the river is no longer cast in shadow by tamarisk. Jayna is engaging the youth in our area: teaching classes in the local schools, leading wetland plant tours, and working on other connections to our community. She also is picking up some field skills - helping to maintain the pupfish ponds!

We had a Nevada Conservation Corps (NCC) crew working on the vole habitat and a trail down at China Ranch. The Student Conservation Association (SCA) crew has started

trail construction along with the NCC, contributing to the future of China Ranch trails.

The SCA also conducted a work-skills training for some of their national leaders. Future leaders attended the training to learn about habitat restoration and trail building, with work benefitting the rich landscape of the Amargosa Basin. With so many projects in progress, we look forward to sunny summer days when we can report on the accomplishments and hard work of this past year looking onward to the next field season. 🌿



The Amargosa River flowed for days on end, and at the peak it was likely coursing at well over 10,000 cfs. The alkali flats of Tecopa filled up with water, reforming Lake Tecopa for a few weeks. It was an incredible spectacle to behold, and is now providing a verdant and colorful spring.

## Record October rains bring floods to the Amargosa

**T**he northern Mojave Desert was hit with a series of very heavy rainstorms in October. Some weather stations received their entire year's precipitation in just two weeks.

The rains brought flash flooding and days of power outages to the Amargosa Basin. Thanks to efforts by SoCal Edison's helicopter operators, power was restored after three days. It took almost a week for local roads to reopen. Two significant roads in Death Valley National Park, Highway 178 over Jubilee Pass and Scotty's Castle Road, remain closed even months later. 🌿

## Yucca Mountain Nuclear Waste Repository back on the table

**Y**ucca Mountain is located at the headwaters of the Amargosa River and has long been proposed as the destination for the nation's high-level nuclear waste. For decades, the Yucca Mountain Nuclear Waste Repository has been a point of controversy, and every few years it seems to be laid to rest by Nevada politicians who refuse to let it move forward.

In late 2015, it rose again with a Supplemental Environmental Impact Statement examining the potential effects of the repository on human health.

The Amargosa Conservancy has been actively involved in the environmental review process. The hydrologic investigations that we have funded reveal information about links between the groundwater

under Yucca Mountain and the waters which emerge in the springs of the Wild and Scenic Amargosa River. These links could alter the analysis of potential effects from Yucca Mountain. "The report [the Conservancy] provided... is what we are looking at now to see if we need to change our analysis," said James Rubenstone, acting director of the Yucca Mountain Directorate. 🌿



# AMARGOSA VOLE

A subspecies of the California vole, the Amargosa Vole became isolated from the rest of its kind over the past several thousand years. As the Mojave desert became a drier and hotter environment, the species became distinct.

Just eight miles up the road from its intact habitat in Tecopa, the Shoshone area had voles as recently as one hundred years ago. Human caused changes to the habitat removed them from this isolated desert spring.

The vole is dependent on a marsh plant known as Olney's threesquare bulrush (*Schoenoplectus americanus*). While threesquare is abundant in Tecopa Marsh, it exists in isolated patches, forming "islands" of habitat for the vole. Recent declines in the vole population due to mite infestation may have resulted from genetic bottlenecks due to these disjointed islands of habitat.

Luckily for the vole, there is an amazing team working toward its recovery.

- The U.S. Fish and Wildlife Service has offered expert personnel and financial backing to allow recovery projects to come to fruition.
- The Bureau of Land Management has prioritized the management of vole habitat, and helped facilitate recovery projects on private land as well.

- The California Department of Fish and Wildlife has provided technical expertise and taken the lead on range surveys.
- The University of California – Davis is host to a captive breeding colony, giving the species a head start in recovery.
- The University of California – Berkeley and Purdue University are conducting genetic analysis to better understand what makes the Amargosa vole a distinct subspecies.
- The United States Geological Survey conducts range surveys and is currently working on a predator exclosure study.

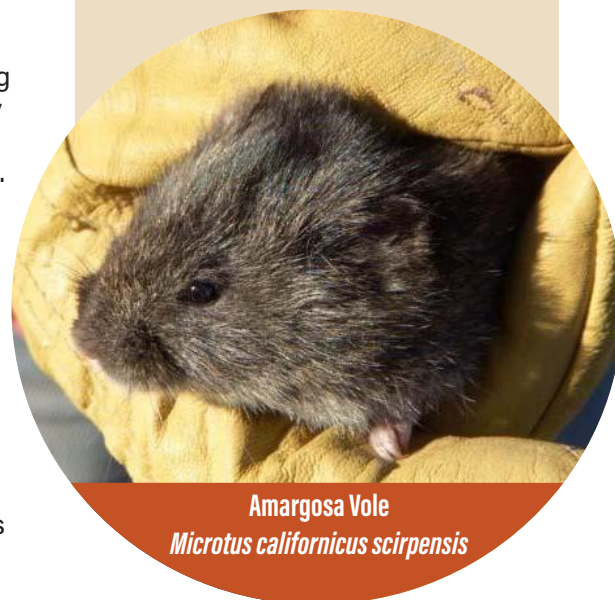
Finally, there is the Amargosa Conservancy! We facilitate local involvement in conservation projects, provide support to visiting team members, and host the many journalists and agency personnel who want to visit the vole's habitat.

Learn more about our involvement in one exciting vole project on page 4.

While the vole is perhaps the most endangered mammal in North America, its future looks much brighter than it has in the recent past. Tremendous effort and resources are being brought to bear by numerous agencies and stakeholders to try to save this charismatic little critter. 🐾

## QUICK FACTS

1. Listed as an endangered species in 1984.
2. Population once fell to as low as two dozen individuals.
3. Currently only lives in marshes around Tecopa, California.
4. Learn more about the Amargosa Conservancy's efforts to protect the vole on page 4.



Amargosa Vole  
*Microtus californicus scirpensis*



# VOLE HABITAT RESTORATION

The vole habitat project is one piece of Shoshone Village's greater effort to foster a biodiverse system at Shoshone Spring. Other special species such as the Shoshone pupfish (*Cyprinodon nevadensis shoshone*) and the Least Bell's Vireo (*Vireo bellii pusillus*) make their home at Shoshone Spring. The Amargosa Conservancy is thrilled to partner on this project.

The first step is to create suitable habitat. Since the vole relies on threesquare bulrush, creating habitat involves clearing existing vegetation and transplanting threesquare.

Ground work began in December with in the clearing of over a half acre of marsh near Shoshone Spring. Teams removed three hundred cubic yards of overgrowth from the marsh. Our clearing revealed some interesting information: on part of the marsh, threesquare was

already growing! Now with access to sunlight, threesquare is already growing.

Other parts of the marsh will require more work. We've built a bulrush nursery to cultivate plugs of threesquare for transplanting. To encourage growth, we will contour the land to direct water to appropriate areas. Finally, once the weather is warm and the water is in the right places, we will be outplanting our cultivated bulrush, creating the habitat that voles prefer.

Next, we will build interpretive trails for visitors to learn more about the Amargosa vole. A boardwalk will provide a firsthand look at the restored vole habitat and give access to the lush biodiversity of Shoshone Spring.

After a few years of tending, the marshes will be ready to host Amargosa voles. The UC Davis School

of Veterinary Medicine has a breeding colony, where voles are being raised for reintroduction in Tecopa and Shoshone. We all look forward to that wonderful day when the voles are released into this restored habitat!

We hope that the Shoshone Restoration Project will serve as a model for other private landowner interactions with endangered species. The owners of Shoshone Village have devoted some of their property to the conservation of the Amargosa vole.

The Shoshone Restoration Project is intended to demonstrate that private landowners and endangered species can not only coexist, but thrive together. We applaud Susan and Robbie, and hope that other landowners across the West will take note of the benefits that endangered species conservation can bring. Keep your eyes on our website for further updates about this exciting project! 🌱



## PROJECT STATS

**Start Date:** December 2015

**Habitat development size:**  
One half acre

**Expected vole reintroduction date:** Spring 2018

**Partners:** Shoshone Village, CADFW, UC Davis, USFWS, Partners for Fish and Wildlife

**Volume of material cleared:**  
330 cubic yards



# A MAJOR VICTORY!

## Amargosa Basin National Conservation Lands provide permanent protection

As the United States moves toward reducing the impacts of fossil fuel combustion in our energy system, the California desert has increasingly become viewed as a source of renewable energy. Over the past decade, numerous proposals for industrial-scale solar and wind farms have come forward, and frequently these have caused significant controversy.

In an effort to address issues with industrial-scale renewable energy on a desert-wide basis, the Desert Renewable Energy and Conservation Plan (DRECP) has been in development for several years. The purpose of this plan was for agencies, specifically the Bureau of Land Management and the California Energy Commission, to look at the entire desert and select locations for renewable energy where

resource conflicts would ostensibly be minimized, and to identify sensitive locations where resource conservation should instead be prioritized.

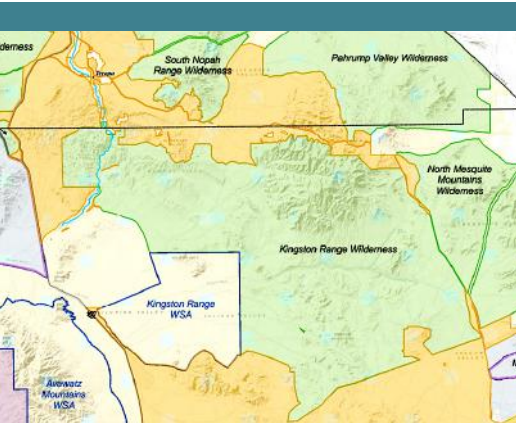
We are extremely pleased to report that BLM has decided to designate nearly all public lands in the Amargosa Basin as National Conservation Lands. Over 600,000 acres of land will be so designated, forever protecting the outstanding ecological, cultural, and recreational values present there. This tremendous accomplishment could not have been achieved without the concerted efforts of national and local NGO's as well as engaged community members.

Across the Western U.S., the National Conservation Lands consist of 35 million acres of nationally significant landscapes on public land. This area is managed by the BLM to conserve their outstanding cultural, ecological, and scientific values. These lands include National Monuments,

Wilderness Areas, Wilderness Study Areas, Wild and Scenic Rivers, and National Scenic and Historic Trails. Now the Conservation Lands of the California Desert will formally be added to the system.

Much of the BLM-managed public land in the Amargosa Basin was previously protected as federally designated Wilderness Areas. However, many of the valleys which tie the landscape together were previously unprotected. One of the most iconic of these valleys is Silurian Valley, the enormous basin which drains into Salt Creek, and thence into the Amargosa River. Industrial-scale solar and wind proposals threatened the welfare of Silurian Valley but now, rest assured, it will be protected forever.

The designation of these Amargosa Basin National Conservation Lands is a major victory for conservation in our community, and we applaud the BLM for making such a bold decision. 🌿



## DESIGNATION DETAILS

- For a full map and to learn more about this exciting development go to [www.amargosaconservancy.org/conservationlands](http://www.amargosaconservancy.org/conservationlands)
- 600,000 acres to be designated as National Conservation Lands
- Connects habitat between existing wilderness areas.

# BE OURS

## Because You Love the Amargosa Basin

...And You Can't Spell **LOVE**  
Without **VOLE**



### Membership Levels

- ☐ \$35 Member
- ☐ \$75 Friend of the Vole
- ☐ \$150 Conservation Hero
- ☐ \$500 Conservancy Guarantor
- ☐ or donate monthly

Voles need bulrush.  
Pupfish need clean water.  
**And we need you!**

With our stewardship projects underway and results coming through from our advocacy work, we are proud to now launch our Spring Membership Appeal!

We are calling on **YOU** to show your support for the work that we do.

Your membership tells us that you believe in what we do. You too want to advocate for the Amargosa Basin and Eastern Mojave. You want to

be on the ground doing restoration work, but since you can't be here every day, you can support our efforts financially.

Help us to continue our many on-the-ground projects, and represent our desert community at the local, state, and national levels through advocacy. 🌱

**THANK YOU FOR YOUR  
SUPPORT!**

### CONNECT WITH US



**AmargosaCons**



**amargosaconservancy**

[info@amargosaconservancy.org](mailto:info@amargosaconservancy.org)  
[www.amargosaconservancy.org](http://www.amargosaconservancy.org)

You can mail us your donation using the enclosed form to:

**PO Box 63  
Shoshone, CA 92384**

Or contribute through our website:

**[www.amargosaconservancy.org/  
support](http://www.amargosaconservancy.org/support)**







This spring we are privileged to have three excellent interns in our office. They each bring a wealth of skills and energy to our team—and some excellent photography. This stunning shot, and our cover photo, are by Abby Mattson.

## October Rains Bring February Flowers

**D**o we become more connected to a place the more that we are able to experience its extreme moods—hot and cold, lows and highs, along with ours?

Here in the Amargosa Basin, with a small human population compared to the size of the landscape, we are perhaps more vulnerable to these moods than if we were in a metropolis. Not all the moods are bad though, and we can see the ties between the harshest weather and the most beautiful floral displays.

In October the basin saw inches of rain, strong winds, and flash floods. The Amargosa River was flowing and (questionably) navigable, but power was out for days and roads across the desert washed away.

Now as the days lengthen we see that all that frenzy set us up for another kind of mania. The carpets of wildflowers are only beginning, and with more recent rains we can only expect the acres to explode with beautiful blooms in the coming months. 🌿



Don't try this at home: rafting the floodwaters of the Amargosa in October.

**"One's options in this world are as vast as the horizon, which is technically a circle and thus infinitely broad. Yet we must choose each step we take with utmost caution, for the footprints we leave behind are as important as the path we will follow. They're part of the same journey - our story."**

- Lori R. Lopez, *Dance Of The Chupacabras*

