



EASTERN NEVADA LANDSCAPE COALITION

# LANDSCAPE NEWS

VOLUME 7, ISSUE 3 APRIL - MAY 2008

## Climate, Fire and Invasive Species Theme for ENLC's Annual Meeting and Field Tour

June is rapidly approaching and ENLC is putting the final touches on the organizing the annual meeting and field tour. ENLC has secured several quality presenters for the meeting and we have extended invitations to several others. We are also hoping to coordinate with the Forest Service to conduct the field tour on the site of the Cathedral Fire to look at the results of the Forest Service's reseedling efforts using a pelleted product.

Patrick Royer, a former ENLC employee, will present the preliminary results of his graduate studies on ecohydrological trends in land-surface microclimate along a grassland forest continuum: near ground solar radiation and soil temperature in piñon-juniper ecosystems.

Neil Frakes will present some of ENLC and the BLM's findings on using proactive strategies to combat invasive plants in recently burned areas. This presentation is quite timely because there is growing pressure on the BLM from Washington to no longer do any restoration work after wild fires. The priorities are for saving lives and structures and with shrinking budgets Washington no longer wants to invest any dollars into post fire restoration work, namely seeding.

Dr. Mark Atkinson, DVM from the Nevada Department of Wildlife (NDOW) will discuss the issue of ecosystem health and the emergence of infectious diseases in animals. Dr. Atkinson is heading up the Great Basin Ecosystem Health Initiative which is a cooperative effort between NDOW, the Nevada Department of Agriculture, the University of Nevada Reno and the US Geological Service.

Dr. Boyd Spratling, DVM will present his observations of fire movement in Elko County and southern Idaho over the past couple of years and the impacts on wildlife, the natural resources and agriculture. Dr. Spratling served many years on the Nevada Wildlife

*Continued on page 4...*

### OUR MISSION

*The mission of the Eastern Nevada Landscape Coalition is to restore the dynamic and diverse landscapes of the Great Basin for present and future generations through collaborative efforts.*

### OUR VISION

*We envision a future where communities of plants and animals thrive in their Great Basin environment. These healed, diverse landscapes will be a result of restoration achieved and maintained with naturally occurring disturbances such as fire, in combination with other management prescriptions, including traditional uses. The Eastern Nevada Landscape Coalition will be a recognized contributor and leader in this effort for future generations of Americans, both local and national.*

### INSIDE THIS ISSUE:

THOUGHTS FROM THE BARN	2
ENLC WINTER WEED MEETING	3
WINTER WEED MEETING SPONSORS	3
FIRST ANNUAL HOLIDAY CAMPAIGN CONTINUES TO GROW	3
THANK YOU ENLC SUPPORTERS	5
BOB WILSON	5
ENLC UPCOMING EVENTS	6
ANNUAL MEETING AND WORK SHOP PRE-REGISTRATION INSERT	

**EXHIBIT Q-2 - LANDS**  
Document consists of 7 pages.  
Entire Exhibit Provided  
Meeting Date: 06-06-08

*ENLC Officers*

John Hiatt, Chairman  
Preston Wright Vice Chairman

*Trustees*

Brent Eldridge  
Roberta Moore  
Gretchen Baker  
Bob Abbey  
Keith Carson

*Staff*

Betsy Macfarlan  
*Executive Director*  
Julie Thompson  
*Ecologist*  
Tempra Board  
*Grant Specialist*

*The Landscape News is  
published four times a year by  
the Nevada Landscape Coalition.*

*Issue Date:*

April/May 2008  
1500 Avenue F  
Ely, Nevada 89301  
Phone: 775-289-7974  
Fax: 775-289-7986  
Email:  
[enlc@sbcglobal.net](mailto:enlc@sbcglobal.net)



## Thoughts from the Barn

### Betsy Macfarlan, Executive Director

I originally started this column in February and I began by extending congratulations to Bob Wilson for an award he had recently received. Tragically Bob passed away very suddenly four days after I had originally started this column. However, I have decided to continue with my original thoughts for the first half of the column.

For those of you who were not familiar with Bob Wilson he was the White Pine County Extension Agent for over a decade. He was also the driving force that conceived of the idea for the Tri-County Weed Program and pushed and pulled it into existence. Bob was actively involved with ENLC since our inception, first as a participant in all the planning meetings that helped set up the coalition, then by assisting me regularly with the planning and speaker recruitment for our annual meeting in June and our Winter Weed Meetings, and for the past several years he served as chairman of ENLC's Science Committee. Bob, working closely with Brandon Vaught of Tri-County Weed Program, helped set up the seven cooperative weed management areas that currently operate under ENLC's non-profit status. In January Bob was recognized by the Western Society of Weed Science for all of his efforts in weed management. Bob was awarded the Outstanding Weed Scientist Award by the Western Society of Weed Science. Bob has been greatly missed and will continue to be missed, but we can honor his memory by continuing his efforts in collaboration and weed management and education.

With the onset of spring ENLC is gearing up for our field season and our ever growing work load. The Forest Service has contacted ENLC about conducting vegetation and wildlife surveys for them. We are excited about

resuming our working relationship with the Forest Service. The BLM is in the process of working on three additional cooperative agreements for ENLC. The new agreements will cover watershed assessments; emergency, stabilization and rehabilitation (post fire); and invasive species work and research within the boundaries of the Steptoe Valley CWMA. Along with these projects ENLC has been contacted about doing some work in Utah and for various private entities.

Early in February I attended a Non-governmental Organization conference in Reno. I made a presentation on ENLC and collaboration. Following my presentation I was approached by several individuals interested in ENLC and possibly working with us on some projects. The conference was very successful for ENLC because it helped get our name and message out to a broader group of people.

At the end of February we successfully hosted our third annual winter weed meeting. To learn more about the meeting, continue reading this newsletter. For the past several weeks I have attended numerous cooperative weed management area meetings and I will be attending the National CWMA Conference in Reno in April.

In addition to gearing up for field season we are in the midst of planning our annual June meeting. To learn more about this year's meeting and for pre-registration information – read on. I hope to see many of you at the June meeting, until then keep up the rain dances.

*Betsy  
Macfarlan*

## ENLC Hosts Winter Weed Meeting and Applicator's Testing

ENLC hosted its third annual winter weed meeting on February 27<sup>th</sup> and 28<sup>th</sup>. Over 90 people participated in this year's meeting. ENLC and Tri-County Weed brought in speakers from across the state and the West. Some of the topics that were covered were: Revegetation strategies post wild fire; How plant communities change over time; Transportation corridors and their impacts on the spread of weeds; and the safety and laws associated with weed management through pesticide applications.

ENLC also offered the opportunity to all of the chemical company representatives to provide a speaker at the workshop. Several of the companies took

advantage of this opportunity and their representatives covered everything from sustainable weed control to integrated weed management and rangeland restoration following disturbance by fire.

This year in addition to the weed meeting, ENLC and Tri County were also able to offer continuing education credits to pesticide applicators if they attended the two day meeting. On Thursday afternoon following the morning session John Carpenter from the Nevada Department of Agriculture administered the applicator test to several individuals who needed to renew their licenses or were attempting to get their license. Carpenter also was the final speaker of the morning session and he gave an interesting presentation on the

do's and don't of applying pesticides legally. He threw in interesting tidbits, such as make sure you punch holes in the bottom of any empty chemical containers to prevent them from being used for storing or hauling other liquids such as water. He also backed these tidbits with antidotal stories from his years with the Nevada Department of Agriculture.

ENLC has set the dates for the 2009 Winter Weed Meeting and we have received confirmation from John Carpenter that he is willing to again administer the applicator test. ENLC will also pursue setting up the meeting so applicators can obtain continuing education credits.

## Sponsors Help Make Winter Weed Meeting a Success

Without our supporters and sponsors ENLC would not be able to hold the costs down on our annual winter weed meeting. We would like to take this opportunity to thank all of our sponsors for the generous support of the Third Annual Winter Weed meeting. Thank you and we look forward to working with you in the future.

**BASF — Dupont — Sierra Pacific — Wilbur Ellis**  
**Southern Nevada Water Authority**

## First Annual Holiday Campaign Continues To Grow

ENLC tried its first direct mail campaign in early December followed up by an article in the January/February newsletter. We selected three key areas we wanted to raise funds for. The three projects were: (1) monitoring three of our restoration projects in Baker, Gleason Creek, and the Smith Valley; (2) hosting our Winter Weed Meeting on February 27-28; and (3) conducting site visits and surveys for potential new projects throughout the Great Basin.

Our goal was to raise \$10,000. The first push generated \$5,825 and since then has grown to \$6,075. ENLC would like to thank everyone who helped make this campaign a success. Below we have listed the names of the campaign supporters whose contribution came in since the last newsletter.

Amy and John Ruhs, Ely, Nevada — gift in memory of Bob Wilson .... Ely Shoshone Tribe, Ely, Nevada  
 Pat and Kena Gloeckner, Pioche, Nevada ... Tempra Board, Chico, California ... Wade Robison, Ely, Nevada

ENLC Annual Meeting and Workshop  
*Continued from page 1...*

Commission and has been a practicing veterinarian and rancher in Elko County for several decades.

We have also invited additional speakers on invasive species and shrubland recovery and we are waiting for confirmation from these individuals.

To peak your interest in the meeting please read the two abstracts included with this article.

**Great Basin Ecosystem Health Initiative**

*Mark Atkinson, DVM. Nevada Department of Wildlife*  
*Anette Rink, DVM, PhD. Nevada Department of Agriculture*  
*David Thain, DVM. University of Nevada Reno*

Viable animal populations are an essential component of a balanced ecosystem and healthy, reproductively normal animals are necessary to maintain this population viability. Human effects, climate change, drought and wildfires have significantly impacted the ability of the Great Basin Ecosystem (GBE) to support healthy populations of wild and domestic animals and this in turn has negatively impacted the livelihood and quality of life of those people who share the resources. The Great Basin Ecosystem Health Initiative is a proposed, collaborative, multidisciplinary project between NDOW, NDOA, UNR, USGS and other interested parties including NGOs, wildlife veterinarians and agencies from neighboring states which aims to apply the best of the health sciences to help solve current and emerging conservation challenges in the GBE. We plan to take a holistic, trans-disciplinary approach to understand the health of the ecosystem as a whole and

will bring together professionals from diverse disciplines (veterinary, medical, ecological) to work together to address complex aspects of the intersection of health and the environment in this region.

Emerging infectious diseases or EIDs are a significant manifestation of diminishing ecological health and habitat loss, climate change, land use and chemical pollution all contribute to providing a medium for disease outbreaks. How environmental changes over the past decade have affected the health of terrestrial animals in the GBE is largely unknown because information on what diseases were present prior to these changes is lacking. As we plan for the future, we must play close attention to the risks of disease (both infectious and noninfectious) and factor these risks into our management models. Baseline data on diseases of animal populations will be crucial for us to accurately predict changes in today's changing climate and must be gathered prospectively through long-term, consistent disease monitoring programs that collect information on all endemic diseases in all habitats for key species.

**Ecohydrological trends in land-surface microclimate along a grassland forest continuum: near ground solar radiation and soil temperature in piñon-juniper ecosystem**

Royer, Patrick D<sup>1</sup> David D. Breshears<sup>1,2,3</sup> Chris B. Zhou<sup>1</sup> and Neil S. Cobb<sup>4</sup>

1. University of Arizona, School of Natural Resources, Tucson, AZ 85721
2. University of Arizona, Ecology & Evolutionary Biology, Tucson, AZ 85721
3. University of Arizona, Institute for the Study of Planet Earth, Tucson, AZ 85721

4. Northern Arizona University, Merriam Powell Center for Environmental Research and Department of Biological Sciences, Flagstaff, AZ 86011

Land-surface microclimate is an important driver of vegetation and of feedbacks to climate, and is particularly important through its role in driving the dynamics of soil moisture and associated ecohydrological processes. Land-surface microclimate is affected directly by shrub or tree cover, and recent modeling studies have predicted trends in microclimate as a function of the amount and stature of woody plant cover. Here we evaluate previous predictions of near-ground solar radiation as a function of amount of woody plant cover and assess associated trends in soil temperature that drive soil evaporation rates. We focus on piñon-juniper ecosystems, which are extensive and dynamic throughout North America, and characterized spatially as heterogeneous; ranging in woody plant canopy cover from savannah with less than 5%, to dense woodlands with greater than 60%. We established a series of research transects in piñon-juniper ecosystems on a mesa north of Flagstaff that ranged in cover from 5% to 65% and estimated near-ground solar radiation using hemispherical photographs and measured soil temperature dynamics at 5 cm.

Consistent with previous model predictions, solar radiation exhibited a near-linear decrease with increasing cover, and a peak variance at less than 50%. Soil temperature changed systematically from low to high cover values, with the magnitude of difference varying with season, and with the greatest difference between low and high cover sites

*Continued from page 4...*

occurring when temperatures were hottest. Our results provide a basis for assessing ecohydrological changes in soil evaporation as a function of woody plant canopy cover. In addition, our results provide a baseline set of relationships against which the effects of disturbances that alter canopy cover,

such as fire, drought-triggered tree die-off and forest thinning, can be evaluated. More generally, they provide general insights about trends in land surface micro-climate along gradients of vegetation that can span a continuum from grassland to forest.

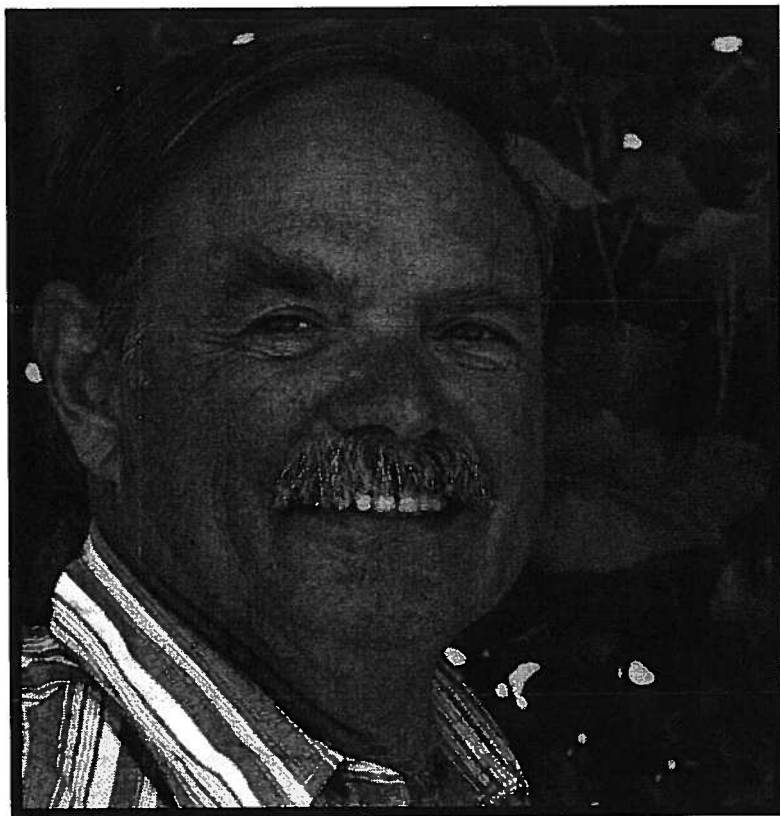
For your convenience ENLC has included a pre-registration form with this newsletter. We

are still working out the details for the 2008 volunteer day and will get them to you as soon as we have identified which project we are going to take on. Please take a moment and fill out the enclosed pre-registration form and mail or fax it in before the **June 2<sup>nd</sup> deadline**.

## Thank You ENLC Supporters

ENLC extends thanks to the following individuals and businesses for renewing their membership with ENLC or joining ENLC for the first time between January 23, 2008 and April 14, 2008. (New members are in bold.) If you have joined or renewed your membership during this time period and you do not find your name listed below please contact us immediately and we will figure out what happened.

Bath Lumber, Ely, Nevada ... Cindy Salo, Boise, Idaho ... Dan Hathaway, Natural Way Conservancy, Baker, NV  
 Danny and Vikki Riddle, Las Vegas, Nevada ... **Kevin Hull, Carson City, NV** ... Gary Back, Elko, Nevada  
**David Sims, Sierra Pacific/Nevada Power Co., Las Vegas, Nevada** ... Gretchen Baker, Baker, Nevada  
 Jim and Donna Bath, Ely, Nevada ... S and S Macfarlan, Boulder, Colorado  
**Tempra Board, Chico, California** ... Thomas Gardner, Paragonan, Utah



## In Memory of Bob Wilson

**6/15/1948-2/16/2008**

On Friday, February 22<sup>nd</sup> Bob's friends and family gathered in Ely his home away from home to celebrate his life. Bob was a dedicated family man who commuted eight hours each way every week, so he could spend the weekend with his family and the work week with us in White Pine County. Bob was involved in a wide variety of activities. He knew everyone and everyone knew they were welcome to speak their minds and Bob would listen. He might not always agree, but he always enjoyed a vigorous discussion. Bob's larger than life personality will be missed by all of us in eastern Nevada.



**EASTERN NEVADA  
LANDSCAPE COALITION**

P.O. Box 150266  
Ely, Nevada 89315  
Phone: 775-289-7974  
Email: [enlc@sbcglobal.net](mailto:enlc@sbcglobal.net)



**USING THE USES FOR  
MANAGEMENT.**

## ENLC UPCOMING EVENTS

### 2008

- |            |   |
|------------|---|
| May 4      | ENLC Board of Trustees Meeting                                      |
| June 13    | ENLC Annual Meeting, Field Tour and Barbecue                        |
| June 14    | ENLC 4th Annual Volunteer Day                                       |
| June 14    | ENLC Board of Trustees Meeting                                      |
| October 4  | ENLC Board of Trustees Meeting                                      |
| October 14 | Railroad Valley CWMA meeting, 3:30 p.m., Current Community Center   |
| October 28 | Spring Valley CWMA meeting, 10:00 a.m., Cleveland Ranch Shop        |
| October 29 | Snake Valley CWMA meeting, 4:00 p.m., Baker Senior Center           |
| October 30 | Newark/Long Valley CWMA meeting, 10:00 a.m., Scoppetone Ranch       |
| October 30 | White River CWMA meeting, 4:00 p.m., Lund Fire Station meeting room |

### 2009

- |               |   |
|---------------|---|
| January 21-22 | Fourth Annual Winter Weed Meeting and Applicator's Test |
|---------------|---|

**EASTERN NEVADA LANDSCAPE COALITION  
NINTH ANNUAL MEETING & FIELD TOUR  
JUNE 13, 2008**

**FOURTH ANNUAL VOLUNTEER DAY  
JUNE 14, 2008**

**PRE-REGISTRATION FORM**

**Please mail this form to: Eastern Nevada Landscape Coalition  
PO Box 150266 Ely, Nevada 89315 or fax to: 775-289-7986**

**NAME:**

---

**BUSINESS/ORGANIZATION:**

---

**MAILING ADDRESS:**

---

**CITY, STATE, ZIP:**

---

**EMAIL ADDRESS:** \_\_\_\_\_

**PHONE:** \_\_\_\_\_