Restoration Fusion: The Utilization of a Young, Diverse Membership and Unique Partnerships to Accomplish Wildland Recovery Throughout California

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American Conservation Experience, Dulzura, Boulder Creek, and South Lake Tahoe

Introduction

American Conservation Experience (ACE), a non-profit service organization, creates meaningful career-building opportunities in wildland restoration for its young and diverse members by partnering with like-minded federal, state, local, and non-profit land agencies and organizations. In 2018, local ACE California crews worked in partnership with the Napa Valley Land Trust, Back Country Land Trust, Pinnacles National Park, and Land Trust of Napa County to remove invasive species, conduct fuels reduction efforts, and regenerate areas with native plants. Through hands-on field projects such as these, a variety of land partners, ACE youth members are able to broaden their land-based restoration knowledge and skills while contributing to the greater community. This poster will demonstrate how meaningful partnerships provide youth from diverse backgrounds the opportunity to engage in successful restoration projects with a focus on invasive species management.

Back Country Land Trust

Since 2019 Back Country Land Trust (BCLT), a non-profit organization, has been working diligently to preserve open space and protect the small mountain community of Alpine, CA, from potentially catastrophic wildfire danger. The BCLT has united with many local agencies, partners, and residents to focus on and control invasive plants in the city. Wantrup Preserve- a 30-acre piece of land- is an oasis in the middle of the city, full of unique and diverse wildlife. The preserve contains a substantial amount of invasive species which are crowding out native plant life. The main invader, Himalayan blackberry, is an ever-present threat to the preserve. In 2018, ACE crews spent 3,579 hours on restoration-oriented work across seven LTNC properties:

- crews pulled 7.389 acres (and 302.79 cubic feet) of invasive plants including vetch, Echscholkzia californica (California poppy), and Arundo donax (standing canes).
- crews also collected 10 ounces of Orthocerus californicus (California poppy) seed for future park revegetation efforts.

Pinnacles National Park

Invasive plants, including yellow starthistle, Saharan mustard, and hornbeams, are at high concern for central California’s Pinnacles National Park. Through the youth partnering program, American Conservation Experience (ACE) crews, based out San Francisco, north of Santa Cruz, conducted mechanical control on these invasive species using hand tools and brush cutters. In 2018, ACE crews amassed 838 hours working toward the program's five guiding principles:

1. Provide opportunities for ACE crew members to learn technical skills and gain natural resources management experience.
2. Add to fire reduction activities within infrastructure, particularly around infrastructure that is critical to natural resources protection, like the park center facility.
3. Assist vegetation management program in controlling 50 acres of yellow starthistle in the park’s inventory areas.
4. Bring highly-skilled crews to a high-intensity condition through extensive invasive species control and aggressively-deploying resources through fuel reduction.
5. Offer opportunities for ACE crew members to contribute to, and gain an understanding of resources management efforts through vegetation management and fire activities in Pinnacles National Park.

In total, ACE crews removed:
- 9,510 thousand invasive plant species
- 30,000 invasive plants
- 7,350 invasive plant species
- 4,500 invasive plant species

During the winter of 2018-2019, ACE crews based out of the organization’s Dulzura, California branch, worked a total of 1,480 hours controlling Arundo and other invasive plant species by mechanical brush cutting, hand thinning, hand weeding, and chemical weed control. In total, ACE crews treated:
- 0.3 acres of Arundo donax
- 1,648 square feet of yellow starthistle (line of invasion)
- 1,271 square feet of Desert pea (bush vines), Primu marcardiaca (quarter heart), Nicotiana glauca (Russian vine), and Zizyphus obtusa (Russian olive).

ACE crews also participated in invasive species management projects by planting:
- 352 potted plants of various species
- 155 willow cuttings

Urban Interface (WUI) areas—unmaintained open spaces that border homes and businesses.

ACE crews also collected 10 ounces of Orthocerus californicus seed for future park revegetation efforts.

Plumas National Forest

With 127,000 acres of intact old growth fir and pine forest and 75 miles of Pacific Crest Trail, the 1,146,000 acres Plumas National Forest embodies the heart of California’s northern Sierra Nevada. In 2017, American Conservation Experience’s northern California branch, based in South Lake Tahoe, launched a 5-year, $250,000 partnership with the Plumas National Forest. Restoration work includes invasive plant control and conifer thinning to enhance rare aspen stand health and sensitive species habitat.

Priority invasive weed projects have begun in several wildland fire scars within the forest’s Mt. Hough Ranger District - the 52,000-acre Storey-Rich Fire and the 65,000-acre and heavily litigated Moonlight Fire.

The Plumas National Forest contains some of the finest remaining old growth forest in the country. In 2018, ACE crews removed:
- 1,000 individual Russian olive plants
- 780 Russian olive plants
- 360 Russian olive plants
- 200 Russian olive plants

In total, ACE crews spent 401 hours implementing disease-free and weed-free fire line invasive species plant treatment and habitat enhancement projects. Project accomplishments include mechanical and chemical control of:
- 15,000 individual Russian olive potted plants
- 78,000 acres of Russian olive
- 16,000 acres of Russian olive
- 2 acres of Russian olive

ACE crews also collected 10 ounces of Orthocerus californicus seed for future park revegetation efforts.

Land Trust of Napa County

Established in 1976, Land Trust of Napa County (LTNC), a community-based nonprofit, has dedicated itself to protecting the natural land forever. In the organization’s 43-year history, 19,604 acres, or almost 75% of Napa’s County, have been protected through conservation easements, open spaces, and property transfers. During the 2018-2019 season, youth Preserve Partnership crews from the American Conservation Experience (ACE) spent 3,579 hours on restoration-oriented work across these seven LTNC properties:

- Idiomar-Skull Valley Wildlife Preserve
- Dunn-Wilkins Ranch Preserve
- Linda Falls Preserve
- Arroyo Taylor Preserve
- Waddington Preserve
- Winnie Ridge Preserve
- Osgood Preserve

In total, crews pulled 3,359 acres (and 302.79 cubic feet) of invasive plants including vine, Soda straw, yellow starthistle, Russian olive, Mediocris radicans, and progress grass hand in hand with digging tools and weed wrenches. ACE’s limited-use vegetation at the Linda Falls Preserve. In addition, a majority of ACE members attended a 100 hour volunteer orientation on invasive weed control, during which they removed invasive plants along a local community pathway.

Conclusion

In 2018, American Conservation Experience (ACE) California crews successfully controlled a total of 148,685 acres of invasive species, removed an additional 115,995 invasive plants, installed 225 habitat tiles, and collected 156 species of Cudexes revegetation efforts in partnership with Back Country Land Trust, Pinnacles National Park, Plumas National Forest, and Land Trust of Napa County. Through a variety of wildland restoration projects, a diversity of members from across the United States and beyond work to develop tangible technical skills in the field of conservation, while improving interpersonal skills and transferability to any career path.

ACE’s crews are able to directly connect with their surroundings and work together as part of a much larger collaborative effort to restore our public lands. These lasting and evolving partnerships with local, state, federal, and non-profit land agencies continue to afford diverse youth opportunities to explore resource management careers through multi-faceted, impactful outdoor experiences.

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