



# Master Level Foothill Yellow-legged Frog

## Field Workshop 2026

### OVERVIEW

This field-only workshop will take place on four meeting dates (April [TBD]; first week of June; third week of August; and third week of September in 2026). Early dates are TBD and based on progression of foothill yellow-legged frog (*Rana boylei*) breeding phenology for the year of enrollment. These dates are distributed over a 12-month season for this species and are designed to expose participants to all life stages of this species. Specific meetings will be timed to coincide with specific foothill yellow-legged frog life history stages: breeding/egg-laying, larval, post-metamorphic, and adult, and may shift on the calendar, depending upon frog development. Each participant will have the potential to observe egg masses and to see and handle one or more of the three post-oviposit life stages of this threatened/endangered frog. Field sites will include North Bay Area, North Coast Range, Sierras, South Coast Range); each selected to coincide with different distinct population segments. Night surveys will also be conducted to help participants to distinguish among adult bullfrogs, western toads, Sierra treefrogs, California red-legged frogs and other sympatric nocturnal species, and to illustrate unique non-diurnal behaviors of the foothill yellow-legged frog.

With the exception of Altig and McDiarmid (2015), all required reading materials will be provided to paid participants before each session. In addition to gear recommended in each session, participants should supply their own boots, binoculars, flashlights, headlamps, etc. Disinfection stations may be provided for all equipment entering the site. However, you should arrive with disinfected equipment.

**Please read the prerequisites for participation at the end of this document.**

### INSTRUCTORS AND FIELD TIME

Instructors **Jeff Alvarez** and **Jeff Wilcox** have held recovery permits for many years and published more than 150 manuscripts from their research on California amphibians and reptiles, including ten publications related to foothill yellow-legged frog natural history. The instructor-to-participant ratio will be 6:1, allowing for close interaction at all stages of the course.

Participants will be expected to select dates and time periods from the pre-selected field-site options and will be required to attend four offered segments. Each participant should expect to



gain 20 to 25 hours of field experience in occupied habitat. Handling of specimens will include instructional discussions on anatomy, morphology, sex determination and dimorphism, safe handling techniques, and more.

At the end of the workshop, each participant who attended the four sessions in good standing will receive a letter indicating the total number of hours of field time as well as the number of each life stage observed and handled.

## **COURSE BREAKDOWN**

*Session location and timing may change, based on site conditions and frog presence.*

### **SESSION A: EGG MASS SURVEYS (mid-MAR to late-APR 2026 – based on presence of egg masses)**

Location and times: Sonoma County

Date/time: We will need to notify you through email (frog reproduction dependent)

Hours in the field: 4-5

Recommended field gear: camera, polarized sunglasses

Breeding-season surveys will be conducted in occupied habitat at several sites where foothill yellow-legged frogs are extant, and where the eggs of red-legged frog, Pacific treefrog, and other species may be easily observed from the dry shoreline. Habitats in which the frogs reproduce will be discussed; the microhabitat associated with egg masses will be a focal topic. (Note: Participants will not be permitted to handle egg masses or to enter aquatic portions of habitat.)

#### Required reading:

Alvarez, J. A., and J. T. Wilcox. 2021. Observations of atypical habitat use by foothill yellow-legged frogs (*Rana boylei*) in the Coast Range of California. *Western North American Naturalist* 81:293–299.

### **SESSION B: LARVAL SURVEYS (24 or 27 JUN 2026)**

Location and times: Santa Clara County

Hours in the field: 4-5

Required field gear: Hip or chest waders

Participants will be exposed to several aquatic sites where foothill yellow-legged frogs normally breed in large numbers. Larval surveys will include dip-net surveys to collect the larvae of foothill yellow-legged frogs, western toad, Pacific treefrog, California newt, rough-skinned newt, and/or red-bellied newt. Habitat and microhabitat used by foothill yellow-legged frogs and sympatric species will be discussed in detail.

#### Highly recommended reading:

Gosner, K. L. 1960. A simplified table for staging anuran embryos and larvae with notes on identification. *Herpetologica* 16:183–190.

Hansen, R. W., and J. D. Shedd. 2024. *California Amphibians and Reptiles*, Princeton University Press, Princeton, New Jersey.



## SESSION C: SURVEYS IN THE SIERRA NEVADA (12 or 15 AUG 2026)

Location and times: Eldorado County

Hours in the field: 4-5

Highly recommended field gear: hat, binoculars, polarized sunglasses.

Participants will conduct visual surveys in typical habitats, including a significant walk through upland and dispersal habitat features where frogs might not appear to exist, but do. Participants should expect to see adults, juveniles, and larvae.

Access to and collection of frogs varies on the specific conditions of the site. Instructors may do all collection. Handling will occur within small groups of participants.

### Required reading:

Alvarez, J. A., and J. T. Wilcox. 2022. Minimum size at metamorphosis in *Rana boylei* (Neobatrachia: Ranidae), in Central California. *Herpetology Notes* 15:395–397.

Cook, D. G., S. White, P. White, and E. White. 2012. *Rana boylei* (Foothill yellow-legged frog). Upland movement. *Herpetological Review* 43:325–326.

Alvarez, J. A., M. L. Olson, and J. T. Wilcox. 2023. Novel use of upland microhabitat by *Rana boylei* Baird 1854, in a perennial river drainage in the foothills of the Sierra Nevada, central California, USA. *Sonoran Herpetologist* 36:74–75

## SESSION D: SURVEYS FOR ADULT/POST-METAMORPHIC FROGS (16 or 19 SEPT 2026)

Location and times: San Benito County

Hours in the field: 6–8

Required field gear: hat, binoculars, polarized sunglasses

Visual daylight and nighttime surveys for adult and juvenile foothill yellow-legged frogs will be conducted in natural habitat. Participants will be exposed occupied habitat where frogs are extant and habitat in which they breed. Participants should expect to see frog adults and juveniles during the daytime and nighttime.

Access to and collection of frogs varies on the specific conditions of the site. Instructors may do all collection, and handling will occur within small groups of participants.

### Required reading:

Wilcox, J. T., and J. A. Alvarez. 2019. Wrestling for real estate: male-male interactions in breeding foothill yellow-legged frogs (*Rana boylei*). *Western Wildlife* 6:14–17.

Corben, C., and G. M. Fellers. 2001. A technique for detecting eyeshine of amphibians and reptiles. *Herpetological Review* 32:89–91.

Alvarez, J. A., J. H. Schmieg, and J. T. Wilcox. 2024. Diurnal versus nocturnal surveys of foothill yellow-legged frogs. *Journal of Wildlife Management* 2024:e22695.



## MEETING DATES AND LOCATIONS

The varied timing and dynamic nature of reproduction and growth in foothill yellow-legged frogs requires that this workshop avail itself of windows of productive field time. This is particularly true for egg mass surveys, which must be timed to within three weeks of reproduction. For this reason, **make-up dates for Session A are not possible**; it is the responsibility of each participant to ensure her/his ability to attend. The peak of foothill yellow-legged frog reproduction changes annually, which makes this segment difficult to predict and schedule in advance. Typically, this species will oviposit after a period of rain following late March, but egg laying can occur as late as May or June.

Scheduling for the remainder of the survey sessions will be set after reproduction has occurred in 2023. This will include windows of time over a several-day period. Possible slots will be offered for each session on a first-come, first-served basis.

## LOGISTICS

Each participant will be provided the location and time of the meeting for the session she/he has selected. It will be the responsibility of the participant to travel to each location and to arrive at the site on time or earlier. Due to accessibility restrictions on some sites, or a need to walk out of the sight of vehicles, late arrivals CANNOT be accommodated. Each field segment is predicted to be 5 hours (in one case, 8-9) long, and each participant will be responsible for bringing her/his own meals, including drinks.

Remember that make-up dates are not possible (frogs are simply unyielding on this issue) and participants will be required to attend the four offered sessions in order to successfully complete the workshop. Participating in only a portion (i.e., fewer than four sessions) of the workshop cannot be accommodated for any individual.

## SUCCESS CRITERIA

The instructors anticipate that each participant who attends the four sessions will observe foothill yellow-legged frog egg masses within their natural habitat and handle a minimum of 10 frogs of various life stages (adult, juvenile, and/or larval, depending on sessions attended). Note: Climatic changes in California make it nearly impossible to guarantee any particular combination of life stages handled, but prior experience at these sites leads us to be confident that the minimum requirements will be met.

*Important:* To the greatest extent possible, participants will be allowed to work closely with the frogs, but protection of the species is paramount; no mortality or injury to foothill yellow-legged frogs of any life stage is acceptable. The instructors reserve the right to exclude noncompliant participants from any or all habitats in order to protect the species. When conditions dictate (such as a danger of trampling or other harassment), instructors may enter a site alone to collect representative animals for brief “show and tell” before returning them to their habitat at the conclusion of the session.



## PREREQUISITE

Participants are required to have completed a previous workshop where the foothill yellow-legged frog was a specific topic. This would include the foothill yellow-legged workshop offered by The Wildlife Society, in Humboldt County, the foothill yellow-legged frog workshop held at Sunol Regional Park, in Alameda County, or the workshop offered by David Cook and Jeff Alvarez, with the Laguna Foundation, in Sonoma County.

A Scientific Collecting Permit from the California Department of Fish and Wildlife is not required but is highly recommended.

## BE AWARE

This workshop does provide significant experience with foothill yellow-legged frogs with permitted biologists. To successfully apply for a permit for foothill yellow-legged frogs in the Sierra Nevada, applicants must also have experience with Sierra Nevada Yellow-legged Frogs (*R. sierrae*). Similarly for the southern California populations of foothill yellow-legged frogs, applicants may be required to have additional experience with the southern mountain yellow-legged frog (*R. muscosa*). Neither *R. sierrae* nor *R. muscosa* are covered under this workshop.

## MATERIALS AND EQUIPMENT

With the exception of Altig and McDiarmid (2015), all required reading materials will be provided to all paid participants. It is the responsibility of each participant to come to each field segment prepared (i.e., having read the required materials and with the proper equipment). Dip nets will be supplied for each workshop attendee. Supplies and materials to decontaminate nets, boots, waders, etc., will be supplied at most field sites but you should come prepared with decontaminated waders and nets. Personal equipment such as boots, waders, binoculars, flashlights, headlamps, and other equipment will be supplied by the participant.

We HIGHLY recommend you invest in appropriate equipment. Although we do have equipment to loan, the number of lights we have are limited. Having your own equipment will facilitate work that you engage in on your own, after securing your permit.

### Recommended lights:

Coast Crew PX1 LED Flashlight (or similar) (\$30)

<https://coastportland.com/collections/led-flashlights/products/coast-crew-px1>

### Headlamp:

LedLenser MH10 with adjustable beam and light intensity (Use ONLY on medium setting)

[https://www.basspro.com/shop/en/ledlenser-mh10-rechargeable-headlamp?hvarAID=shopping\\_googleproductextensions&ds\\_e=GOOGLE&ds\\_c=BPS%7CShopping%7CSmart%7CCamping%7CGeneral%7CNAud%7CTopPerf%7CNMT&gclid=CjwKCAiA2fmdBhBpEiwA4CcHzaC69vAV82UYU\\_3qDV2KTeT5gDrc17LM6GZ3lgl1whgOoHAKthlsZBoCRP0QAvD\\_BwE&gclsrc=aw.ds](https://www.basspro.com/shop/en/ledlenser-mh10-rechargeable-headlamp?hvarAID=shopping_googleproductextensions&ds_e=GOOGLE&ds_c=BPS%7CShopping%7CSmart%7CCamping%7CGeneral%7CNAud%7CTopPerf%7CNMT&gclid=CjwKCAiA2fmdBhBpEiwA4CcHzaC69vAV82UYU_3qDV2KTeT5gDrc17LM6GZ3lgl1whgOoHAKthlsZBoCRP0QAvD_BwE&gclsrc=aw.ds)



# *Registration Instructions*

## **Master level Foothill Yellow-legged Frog Field Workshop - 2025**

Fill out all sections of the registration form. Complete a separate form for each registrant.

### **PAYMENT:**

**Make checks payable to “The Wildlife Project”, or** fill out credit card information on the registration form. Only VISA or MasterCard credit is accepted. We accept Zelle—see QR code, or add the following number as a recipient (209-815-5660). If you need to use Venmo, PayPal, or other methods, please email us to make arrangements. No crypto-currency payments are accepted at this time.

### **Email or snail-mail registration form with your payment to:**

Email: [Workshops@TheWildlifeProject.com](mailto:Workshops@TheWildlifeProject.com)

Mailing address:  
The Wildlife Project Workshops – FYLF  
PO Box 188888  
Sacramento, CA 95818

Confirmation: Confirmation of registration will be sent within two weeks via email or snail mail. The confirmation letter will indicate which time slot you may have received. A follow-up email will include reading materials, meeting locations of field trips, and suggestions about field gear.

Workshop Questions: For questions on registration email: [Workshops@TheWildlifeProject.com](mailto:Workshops@TheWildlifeProject.com)

