

2024 Field Crew Lead

Organization description:

Sierra Streams Institute (SSI) is a watershed monitoring, research, and restoration group based in Nevada City, California, dedicated to linking water, science and people for the benefit of human and environmental health. We work with local, state, and federal agencies as well as universities and community groups to find solutions to the problems that afflict Deer Creek and Bear River, which share historical challenges resulting from gold mining and development, and more recent challenges resulting from wildfire. SSI's emphasis on community involvement and accessible science provides many opportunities for community members to get involved in our work, including ongoing water quality monitoring and seasonal creek surveys.

As part of our summer field crews, you will have the opportunity to get hands-on field experience in a variety of local streams, as well as learn scientific methods for monitoring different aspects of creeks.

Position Description:

Crew Leads will lead teams of members in physical habitat (P-Hab), benthic macroinvertebrate (BMI) and algae surveys. Surveys are conducted at sites in the Yuba River and Bear River Watersheds. Leads will be responsible for following scientific protocol, ensuring accurate data collection, maintaining equipment and overseeing safety of team members. Leads will also be responsible for transporting equipment to and from field sites and assisting with training crew members.

Surveys will be conducted from the headwaters to the lower watershed in both the Yuba and Bear River, along a gradient of stream communities, collecting data on physical habitat (P-Hab), benthic macroinvertebrates (BMI), algae, and eDNA in some locations. Our work will be part of a program to document the biodiversity of Sierran stream invertebrates, which has to this point been under-studied.

P-Hab measures in-stream habitat (wood, rocks, flow), riparian habitat (lower and upper plant canopy), and human impacts (channelization, concrete etc.).

BMI diversity and species composition are indicative of overall stream health. Samples are collected in accordance with regional protocols, and macroinvertebrates are identified in our in-house lab.

Algae samples are collected and processed in our lab, where they are analyzed for biomass. Biomass levels help characterize stream conditions.

Time Commitment:

Crew Lead training will begin the week of May 27. Creek surveys will be carried out through the entire month of June.

Hours/Week: 25-40

Qualifications:

- Strong interest in biology, hydrology, ecology, environmental science or a related field.
 - Completed or pursuing an undergraduate degree is a plus.
- Previous field work experience.
- Experience managing and training teams is a plus.
- Ability to follow scientific protocols.
- Ability to hike through uneven terrain, creeks and vegetation (occasionally poison oak or Himalayan blackberry) and be on your feet for up to 10 hours a day.
- Ability to carry monitoring equipment that weighs up to 50 lbs.
- Must be able to commit to full field season.
- Ability to work with a diverse group of staff/volunteers.
- Strong written and oral communication skills.
- Strong organizational skills.
- Attention to detail.
- Positive attitude and willingness to learn.
- Access to personal vehicle.

Benefits: *Crew leads will receive a stipend of approximately \$21/hour.*

- Work with and learn from scientists in a friendly and supportive environment.
- Get involved in your local watershed.
- Enjoy the outdoors, while learning about local ecosystems.
- Participate in a citizen science program
- Contribute to a robust water quality monitoring dataset.
- Gain field and technical experience, as well as professional networking opportunities.
- Opportunities for school-based credit (varies by institution).

Apply:

Applications accepted through May 15. Please send resume, cover letter and contact for three references to Emma Walker at bugs@sierrastreamsinstitute.org.

2024 Field Crew Member

Organization description:

Sierra Streams Institute (SSI) is a watershed monitoring, research, and restoration group based in Nevada City, California, dedicated to linking water, science and people for the benefit of human and environmental health. We work with local, state, and federal agencies as well as universities and community groups to find solutions to the problems that afflict Deer Creek and Bear River, which share historical challenges resulting from gold mining and development, and more recent challenges resulting from wildfire. SSI's emphasis on community involvement and accessible science provides many opportunities for community members to get involved in our work, including ongoing water quality monitoring and seasonal creek surveys.

As part of our summer field crews, you will have the opportunity to get hands on field experience in a variety of local streams, as well as learn scientific methods for monitoring different aspects of creeks.

Position Description:

Crew members will conduct physical habitat (P-Hab), benthic macroinvertebrate (BMI) and algae surveys at sites in the Yuba River and Bear River Watersheds. Members will be responsible for following scientific protocol and collecting data under the direction of the Crew Lead.

Surveys will be conducted from the headwaters to the lower watershed in both the Yuba and Bear River, along a gradient of stream communities, collecting data on physical habitat (P-Hab), benthic macroinvertebrates (BMI), algae, and eDNA in some locations. Our work will be part of a program to document the biodiversity of Sierran stream invertebrates, which has to this point been under-studied.

P-Hab measures in-stream habitat (wood, rocks, flow), riparian habitat (lower and upper plant canopy), and human impacts (channelization, concrete etc.).

BMI diversity and species composition are indicative of overall stream health. Samples are collected in accordance with regional protocols, and macroinvertebrates are identified in our in-house lab.

Algae samples are collected and processed in our lab, where they are analyzed for biomass. Biomass levels help characterize stream conditions.

Time Commitment:

Crew members will participate in creek surveys throughout the month of June.

Hours/Week: 15-30

Qualifications:

- Strong interest in biology, hydrology, ecology, environmental science or a related field.
- Ability to follow scientific protocols.
- Ability to hike through uneven terrain, creeks and vegetation (occasionally poison oak or Himalayan blackberry) and be on your feet for up to 10 hours a day.
- Ability to carry monitoring equipment that weighs up to 50 lbs.
- Must be able to commit to full field season.
- Ability to work with a diverse group of staff/volunteers.
- Strong written and oral communication skills
- Strong organizational skills.
- Attention to detail.
- Positive attitude and willingness to learn.
- Access to personal vehicle is a plus.

Benefits: *This is an unpaid, volunteer position.*

- Work with and learn from scientists in a friendly and supportive environment.
- Get involved in your local watershed.
- Enjoy the outdoors, while learning about local ecosystems.
- Participate in a citizen science program
- Contribute to a robust water quality monitoring dataset.
- Gain field and technical experience, as well as professional networking opportunities.
- Opportunities for school-based credit (varies by institution).

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