

Nature Bowl 2025

Coaches' Orientation



Nature Bowl 2025

Coaches' Orientation – 1/8/25

Welcome!

As we wait for everyone to join us, test out a few of this webinar's features!

In the **Chat**:

- Introduce yourself!
- Give us your name, school, and how many years you've done Nature Bowl

In the **Q+A**:

- Find the discussion post with your preferred semi-final site and "Like" it. Feel free to comment on that post too.
- You can also ask us questions here!

Reminder: This meeting will be recorded and sent to other coaches who weren't able to join live.



What is Nature Bowl?

Initiated in 1986, Nature Bowl is a fun, science-based team competition for third through sixth grade students in the California Department of Fish and Wildlife's North Central Region, which covers portions of the Sacramento Valley, Delta, Sierra Nevada foothills and mountains.

Teams of students participate in five activities at Semi-Final events held in March and April at various outdoor regional Nature Bowl partner sites. A Finals event is set for May 3 at Camp Pollock.

Nature Bowl activities focus on regional ecology, natural history, and conservation. The program's purpose is to motivate students with hands-on science, to reinforce environmental concepts, to connect science to their own environment and to involve students in community conservation projects. Nature Bowl also serves as a model for teachers to use in their classroom's environmental education instruction and meets current educational standards.

A virtual **Coach Workshop on January 8** introduces Nature Bowl's five activities, their format and resources. This year, a virtual **California Natural History Class for Coaches on January 22** and a **Project Wild Training on February 8** have been added. These coach workshops are held so that coaches are fully prepared and confident to teach and lead their Nature Bowl teams.

How does Nature Bowl work?

Any school or organized group may send one 3rd/4th grade team and one 5th/6th grade team to the Nature Bowl games. Teams are limited to 10 students each. Teachers, parents, or any youth leaders may coach a team. Coaches choose which Semi-Final site to participate. Teams with the highest scores advance to the Finals.



Semi Finals

- When coaches register their teams, they will choose a semi-final site for their team to participate at. This year, teams can choose from 6 sites. Which site you choose is up to you and your location/schedule. Each site will have the same activities, questions, and general number of teams.
- Semi-finals take place on a weekday, and generally take the full school day (9am-3pm). When teams arrive, they will check in and be provided with their schedule for the day.
 - 3rd/4th grade teams will only compete against other 3rd/4th grade teams, and likewise for 5th/6th grade teams.
 - Each team will be grouped with 2-3 other teams to rotate through the activities during the day, however, final scores will be tallied up against all other teams in that grade level.
- Throughout the day, students will rotate through 5 activities, all 30-40 minutes in length. Once all activities have concluded, there will be about 45 minutes of free time during which final scores are being tallied. At some semi-final sites, a special activity (like a game, songs, or story) will be provided for those who wish to participate.
- At the end of each Semi-Final, there will be a short recognition ceremony for all participating teams. We will then announce the top scoring teams in each grade level category, who will advance to the finals.
- All teams should bring their own snacks, lunches, and water. Bathrooms and water fountains are available at all sites, and a lunch break will be provided.

Finals

- Finals take place each year on a Saturday in May. This year, Finals will be held at Camp Pollock in Sacramento on May 3rd, 2025. Families of participating teams are welcome to join the festivities so long as they do not disrupt the students from their activities.
- Finals will follow the same general schedule format as the semi-finals. The activities will each have slightly more difficult questions, and some activities may be swapped out for new ones all together. Coaches will be given details about which activities to expect at the finals after the last semi-final event has concluded.
- At the end of the day, during the awards ceremony, each team will once again be called up in random order and recognized for their strengths. The winning team in each grade level will then be announced and presented with their final prize. Winning teams will get to take home the Golden Pinecone award, which they are allowed to have in their classroom for one full school year until the next years Nature Bowl, and be offered the chance to participate in a CDFW adventure of their choosing.
- Nature Bowl officials will follow up with the winning teams to confirm the details of their final prize after the event concludes. Adventures may include options such as attending a CDFW fish plant, visiting a CDFW land for naturalist day trip, or a special guided trip to one of our local nature conservancies.



Dates To Remember:

Workshops

- January 8: Nature Bowl Coach Workshop
- January 22: California Natural History Class for Coaches (optional)
- February 8: Project WILD Training (optional)
- March 1: Registration Deadline for all teams

Semi-Finals

- March 19 Nimbus Fish Hatchery
- March 25 American River Conservancy
- March 27 Placer Nature Center
- April 3 Stone Lakes National Wildlife Refuge
- April 9 Yolo Basin Wildlife Area
- April 11 New Melones Visitor Center

Finals

- May 3 Camp Pollock in Sacramento

Let the games begin!



Outdoor Investigations

Nature Relay

Team Problem Solving

Speedy Ringers

Enviromercial

Finals Only Events

Outdoor Investigations

Groups of 4, with the remaining team members following/listening. Teams may substitute players midway.

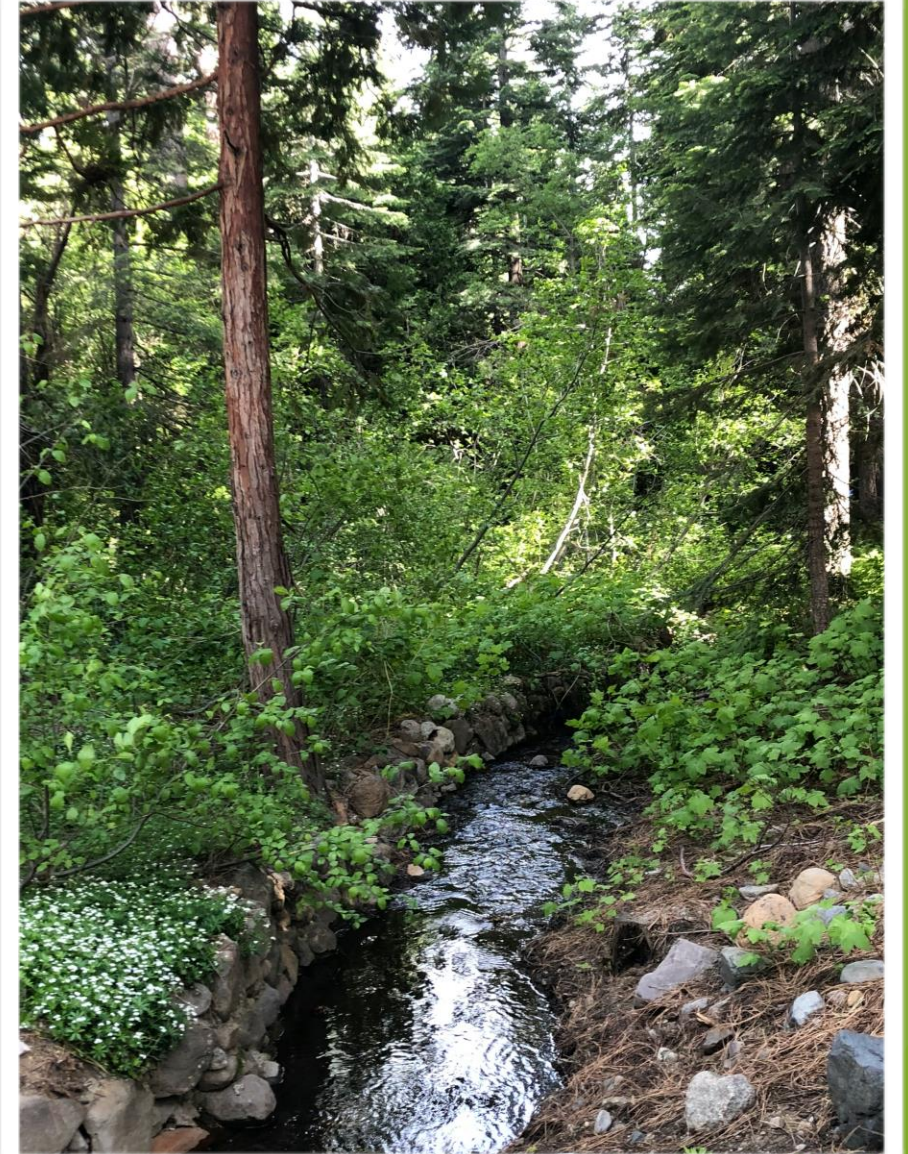
Theme: “Terrestrial Habitats”

A short nature trail is set up with a series of 4-5 questions along the trail. Each question has a time limit, and most include a short lesson before the main question(s).

Questions are longform and multiple parts, and typically include a short lesson before the main question. Teams are accompanied by a judge as they work through the trail, the judge will ask the question and write down the team’s responses without further prompting.

In order to ensure teams are coming up with their answers fully on their own, coaches may not accompany their own team on the trail. The trail is short enough that teams are in view of their coaches, who wait at the starting line, for the full activity.

Emphasis is placed on observation skills, natural resource knowledge, and teamwork.



Outdoor Investigations

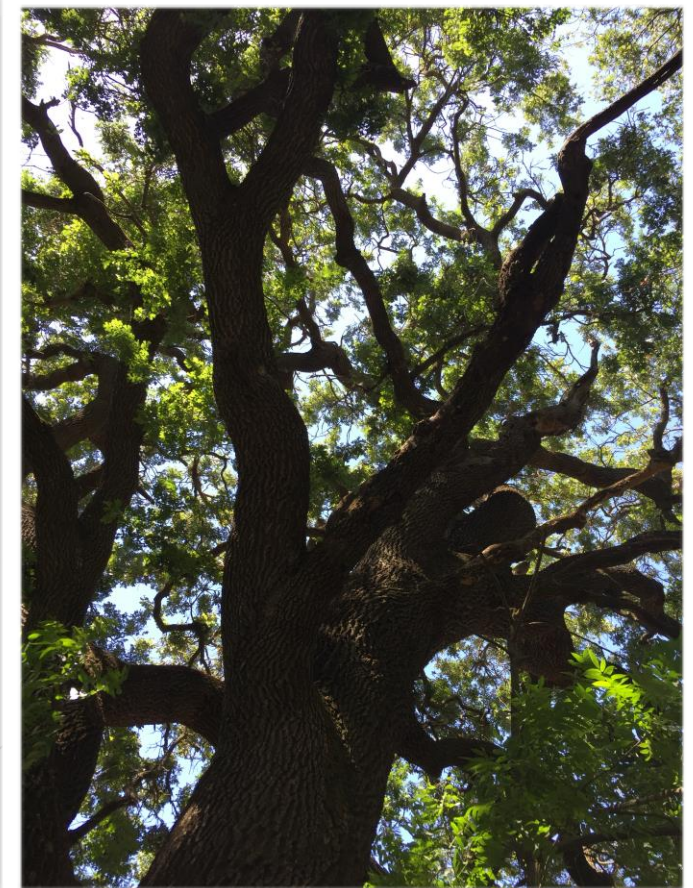
How it Works

Each team will start at a different station along the trail, so that only one team is at a station at a time.

Each station will be marked along the trail with a numbered cone. Some questions may include a prop, such as binoculars, a field guide, or seeds representative of the area. The judge will read the lesson and question, and then will write down exactly what the students say in response. The judge will not provide any additional context or prompting other than what is written on the question.

Sample Questions

1. Here on the trail is an animal track. What type of animal made this track? What are two things you can tell about the animal that made this track, and what they might have been doing? (90 seconds)
2. Search the trail and list the objects that would not naturally be found there. (The trail will be identified by the staff.) 20-25 items. (3 / minutes)
3. What is a deciduous tree? Locate a deciduous tree nearby, and explain one advantage of being deciduous (2 min). Next, using a tree key, determine the name of the tree you found(2 minutes).
4. Identify the niche, or job, of three invertebrates found in this soil sample. (90 seconds)
5. Use a field guide to identify three pollinator species that live here by exact species name. (3 minutes)



Nature Relay

All team members participate.

Items representing environmental concepts (from the Nature Bowl Glossary) are placed in a large saucer. Team members line up opposite the saucer and one at a time, speed walk to retrieve items that represent concepts announced by the judge.

Throughout the game, students on a team rotate so that a different team member is “it” for each question asked.

For each question round: The judge will announce a concept. The team members that are “it” have 20 seconds to speed walk to their saucer, review the items, and return with their selected item to the front of their team line. When all teams have returned, the judge will announce the correct item answer. Teams with the correct item get full points.

If a student selects another item, that student may defend/explain their rationale for that selection to the entire group. The judge determines if student’s defending rationale of that item deserves full points, half points, or no points.



Nature Relay

Sample Questions

Word or phrase is what the judges prompt would be. Item they are looking for is in parenthesis.

3rd/4th grade

- Amphibian (frog puppet)
- Decomposer (fungus)
- Nocturnal mammal (bat)
- Migration (toy salmon)
- Seed (pinecone)
- Herbivore (mouse picture)
- Metamorphosis (butterfly)
- Pollution (oil can)
- Marsh plant (cattail)
- Aquatic Animal (fish picture)
- Predator (rubber snake)

5th/6th grade

- Symbiosis (lichen)
- Invertebrate (spider)
- Feral (toy cat)
- Commensalism (gall)
- Raptor (hawk talon)
- Exotic (opossum)
- Terrestrial mammal (deer antler)
- Riverine (smooth rock)
- Coniferous (pinecone)
- Renewable (water)
- Spawning (toy salmon)

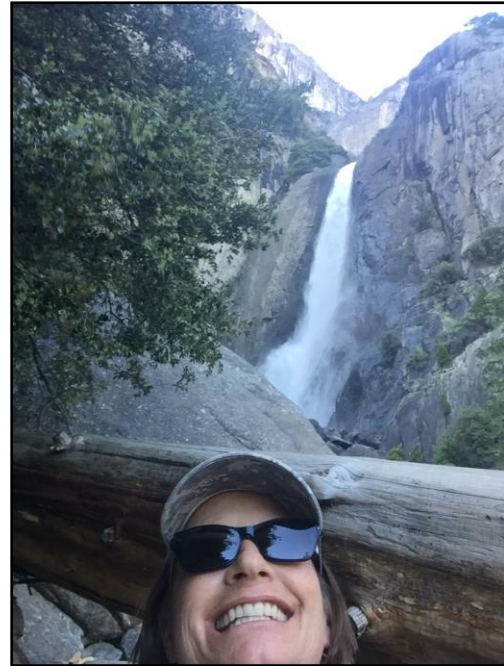


LET'S PLAY RELAY

1



4



6



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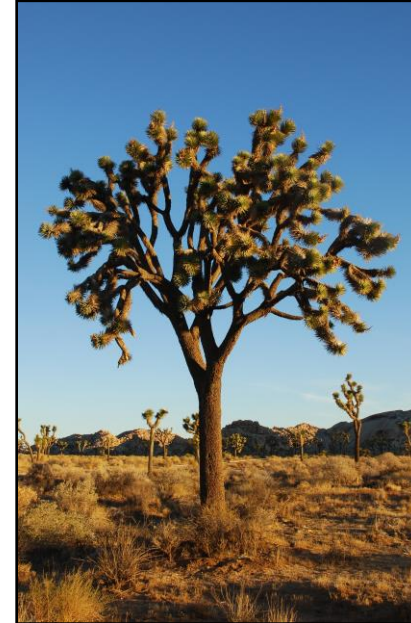
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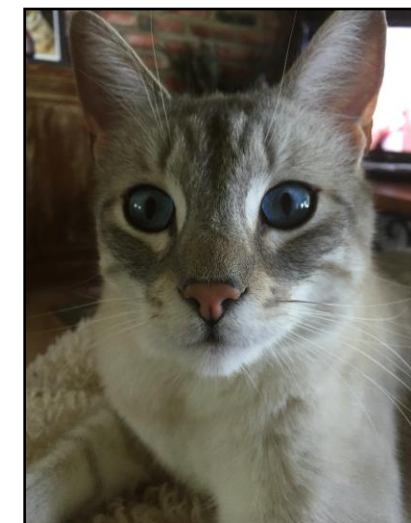
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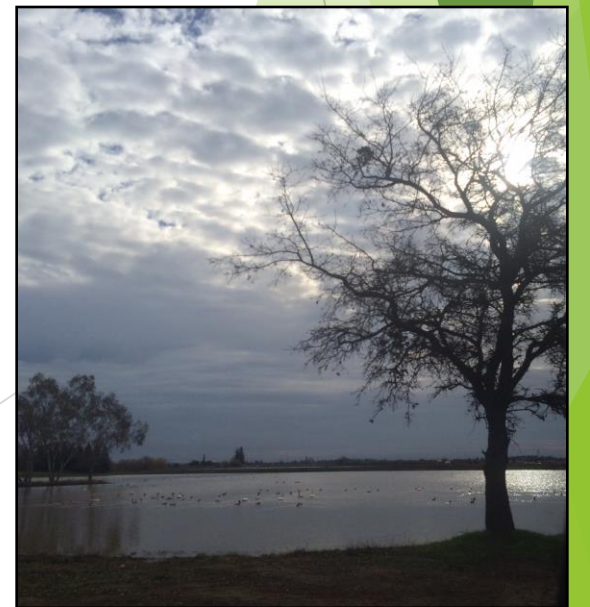
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Team Problem Solving

Groups of 4 students, with substitution of team members midway, so all team members can play.

Theme: “Wildlife”

Teams will be presented with a number of questions that require them to work together on problem solving. Creativity is encouraged. Teams will be seated at tables facing the judges and provided with a sheet of paper to write their answers on, which must be turned in to the judges at the end of the activity.

For each question, the judges will read a prompt to the group. Teammates must then quietly discuss, agree upon an answer, and write it on their answer sheet--all within a time limit. Judges will then call upon one team member from each group to present their team's answer.

Often pictures, puppets, skulls, bones, or other ecological props are used to find the answers. Team problem solving might also include charades or songwriting, as well as questions where teams propose solutions to existing ecological problems.



Team Problem Solving

Sample Questions

3rd/4th grade:

1. Using at least four of the animal puppets in front of you, create a food web found in our region. Write down the animals of your food web and how they are connected, and identify a local habitat type where your food web occurs (90 seconds)
2. You are reporters. Write a simple, but complete caption for this nature photo. Include who, what, where, why and how. (2 minutes)
3. Choose one of the animals listed on the blue card in front of you. Write your word on the answer sheet. Act it out as a team for the other teams to guess. You will have 60 seconds to prepare and 30 seconds to act out the word you selected. You may not use sound effects. The other teams will have 30 seconds to write down their answer. Each team receives points when they correctly guess and when their acting is correctly guessed.

5th/6th grade teams:

1. Name three types of wetlands found in California, three values of wetlands to wildlife, three values for people, and three current threats to wetlands. (2 minutes)
2. On the map provided, pick a California river. Follow the flow of that river from its origin to its drainage into the Pacific Ocean. Name three towns or cities it passes by. (90 seconds)
3. Match the animals with the term that most accurately describes their current status. (At-risk, native, invasive, resident, migratory) (60 seconds)
Select an animal/puppet and construct a five-part food chain appropriate for the animal (90 seconds).



Speedy Ringers

Groups of 3 students--with substitution of team members, so all team members can play.

Theme: "Watery Ecosystems"

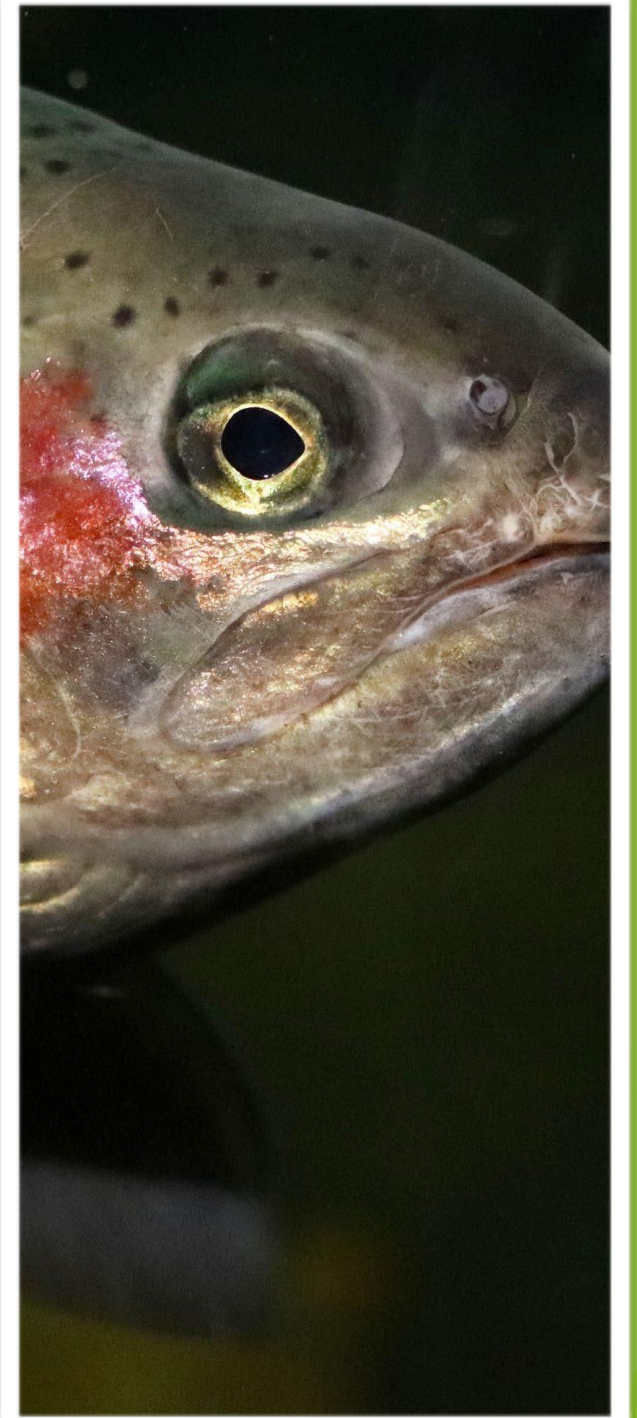
This is a game show style event, with each team sitting at their own table facing the judges, with a bell or buzzer. Teams are presented with short answer questions and answer on a "first-ring" basis. Questions are based on the Nature Bowl Glossary.

How it Works:

The judge will present a question. The team who signals in first is called upon to answer. The person who rang in must start answering within 3 seconds. No discussion amongst team members is allowed once the bell has been rung.

If the answer is incorrect or if that student can't come up with the answer within three seconds, the team that rang in second is called upon. An individual from that team can then answer the question. If they answer incorrectly, the third team may answer and so on.

This is the only activity in the Semi Finals where teams are competing for the same pool of points.



Speedy Ringers

Sample Questions

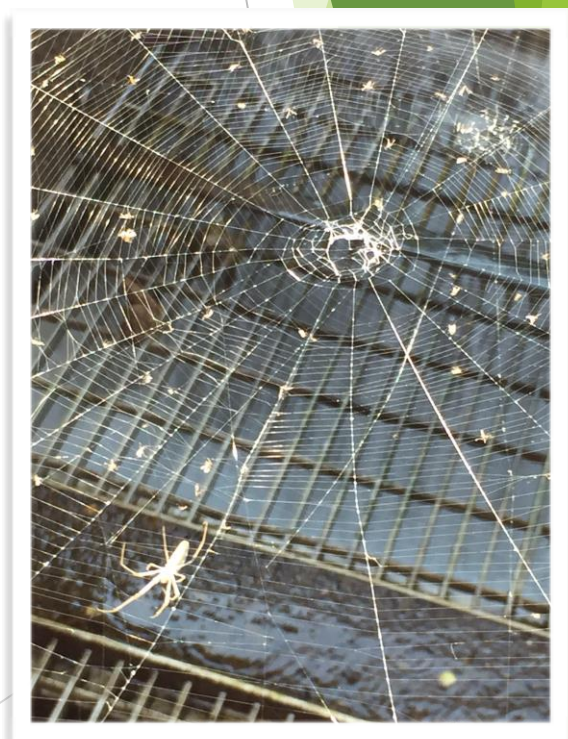
3rd / 4th Grade

1. Name two reasons animals migrate. (Climate, food, to live)
2. Name one animal species that migrates on the Pacific Flyway. (Tundra swan, pintail duck, sandhill crane, fox sparrow)
3. Wildlife needs four basic things to survive. Humans need these things too! What are they? (Food, water, shelter, space)
4. Name two of the mountain ranges that border the Great Central Valley. (Sierra Nevada, Coastal Range)
5. Name two natural resources and the reasons why we should conserve them.
6. I am a wild animal native to California. I will read a series of clues. As soon as you think you know what animal I am, ring in.
7. Name a grassland mammal and one of its adaptations.
8. Name the California state tree.
9. Describe your current geological location.

5th / 6th Grade

1. What is a biologist?
2. Name two renewable energy sources. (Solar, wind, geothermal, hydro)
3. I am a wild animal native to California. I will read a series of clues. As soon as you think you know what animal I am, ring in.
4. What is a major cause of air pollution in California? (Automobile, wildfires)
5. Name two benefits and two problems of dams. (Recreation, power, irrigation, flood protection; disrupts natural migrations, prevents sediment distribution, alters and constricts wild rivers)
6. Name an endangered or threatened species our region. Name two reasons this species is at-risk.
7. What are two functions of feathers? (Flight, warmth, camouflage)
8. Habitat loss is the most serious threat to our native plants and animals. Identify two other current threats to our native plants and animals.
9. Describe your current geological location.

Teams can practice Speedy Ringers with Kahoots games. (Links on our website) Kahoots is also recommended for use after each team meeting/learning session.



Break Time!

Welcome back!

Enviromercial

Full Team

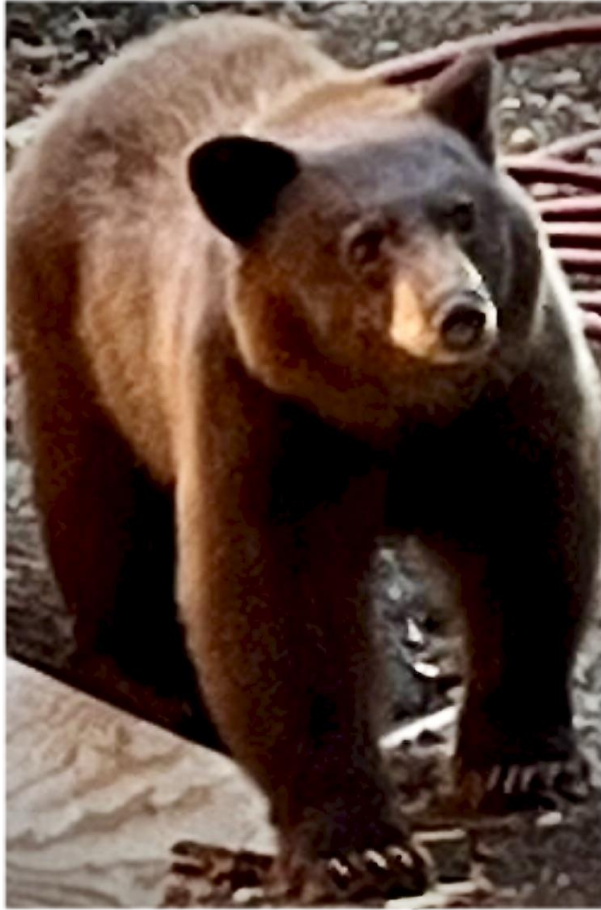
An enviromercial (environmental commercial) is a presentation that is prepared in advance of Nature Bowl. Enviromercials must focus on a local* environmental issue and propose a viable solution. Teams will be provided a general list of topics to choose from that can be narrowed down to their own local issue. Students are encouraged to **gain first-hand information** by visiting a site, interviewing people, attending a meeting and/or being part of a solution

Each team will have 2 minutes to present their enviromercial to a panel of judges. All team members must participate in a specific role – actors, researchers, prop makers, screenwriters, etc. After each presentation, the judges will ask questions about their subject, research, and presentation. Enviromercials may be videotaped by the coach or parent at the event.

Students may write presentation notes on the back side of a 3x5 inch card. Students do not need to memorize their presentation.

Each team must also provide a Judges Packet to the panel of judges prior to their presentation. This packet should only be 1-2 pages long, and provides the judges with evidence of research, team involvement, and actions taken. Keep it simple, and put the creativity toward the enviromercial itself!

Enviromercial



Each Enviromercial should:

- Describe a local or regional environmental issue, its cause(s) and effects. Be specific in topic and focus (how does this impact your community?).
- Describe what, if anything, is currently being done about the issue in your community.
- Suggest a practical solution that would help correct the issue.
- *Optional but encouraged:* Students can create visual aids and other props to use during the presentation. Judges prefer students' homemade props over those purchased or created by adults.

What to put in the Judges' Packet:

- 1-2 sentences explaining the topic
- 1-2 sentences explaining why the team chose this topic
- Identify each student and their role in preparing the enviromercial
- Provide a list of at least 5 sources used in research. This should be a **variety** of up-to-date sources, such as websites, videos, news articles, site visits, etc. At least one source should be from a person in an agency or project currently working on the issue.
- Effectively describe any conservation actions taken by students in the course of their research.

Enviromercial

Judging Criteria

- Choice of Topic: Is it relevant, is it regional/local, is it important?
- Thoroughness: Covers problem, impacts, solutions, depth of research
- Creativity: Creative approach, originality, artistry
- Teamwork: Did everyone participate equally? Did you work together well?
- Resources: Diverse, credible, local or regionalized, different perspectives
- Response to judges' questions: Demonstrates strong comprehension of material
- Overall: Communication abilities, grasp of subject, persuasiveness, enthusiasm, took appropriate action to reduce problem, direct or indirect
- Time: Under the two minute time limit
- Judges Packet: meets all requirements

Suggested Topic List

- Air quality
- Drought
- Water quality
- Habitat loss
- Population growth
- Recycling/Composting/Waste
- Pollution
- Endangered species
- Endangered species
- Consumer choices
- Urban wildlife
- Sustainability
- Pollinators
- Non-native species
- Open space
- Climate change

Example Enviromercials:

•[Grey Water Reclamation, By Ethan Rezentes](#)

•[Pollinators - by the Watershed Wonders](#)

Enviromercial Example



Pollinators - by the Watershed Wonders

Enviromercial Example



Grey Water Reclamation, By Ethan Rezentes

Finals Only Activities

Enviromercial Poster Session

Using the same topic and research used for their semi-final enviromercial, teams will prepare a poster to be presented at the finals, science-fair style. Posters will be posted all day. All teams are encouraged to view the posters and learn more about what their fellow competitors worked on over the last few months. Posters must be either a regular posterboard or a tri-fold.

The official Poster Session will happen at the end of the day, once all other activities have concluded and while scores are being tallied. Additional details can be found in the PDF Coaches Packet, and will be sent to the advancing teams after the last semi-final.

Jeopardy

This game will be similar to the Jeopardy we see on TV, with a few rule changes to adapt it for Nature Bowl. The basic outline can be found in the PDF Coaches Packet. The theme and additional rules will be sent to the advancing teams after the last semi-final.

All other activities will follow the same format as in the semi-finals, with more advanced questions.



General Participation Rules

- ▶ Up to 10 children may be on a team. Some events have a limit to how many students may participate on a team at a time, and will state that in the rules for that event.
- ▶ Teams earn points for correct answers. Each activity is worth a total of 100 points. Partial credit may be given at the judge's discretion. No points will be lost for an incorrect answer. If students are unsure of an answer, they should guess. You have nothing to lose. You may be right!
- ▶ Team members should listen to the complete question before answering and must wait for the judge to call on them for their answer.
- ▶ Teams must show respect and good sportsmanship to each other during the activities and free time. This includes remaining quiet when other teams are responding to questions.
- ▶ Team members, coaches, and parents are not allowed to attend any other session of Nature Bowl semi-finals except for the one their team is participating in. Doing so may result in disqualification. Voice or video recording is also prohibited during the event, except during Enviromercial.
- ▶ Please remember that we are guests in any event space. Please respect the physical event space, as well as any flora and fauna found at your semi-final and final sites. Additional rules and regulations may apply to your specific semi-final or final site.

A note about the competition:

Nature Bowl strives to de-emphasize the competitive nature of the games. Instead, the intent is to maximize cooperation, learning, self-esteem and nature connection. Students are positively reinforced for correct and semi-correct answers, and all participating teams receive the same prizes at their semi-final events.

We purposefully only announce the top scoring teams at the end of each event. Coaches may privately request detailed feedback about their team's scores via email after the event concludes. There is no such thing as "failing" or "losing" Nature Bowl – we are all here to learn and create meaningful connections to the outdoors!

Coach Preparation Checklist

Getting Started

- Attend the coaches workshop
- Attend other optional coach training opportunities
- Form a team
- Register for your semi-final event

Preparing your team

- Acquaint students with Nature Bowl
- Schedule time for your team to meet 1-2x a week leading up to your semi-final event
- Review the rules/format of the event as a whole and each specific game
- Practice each game format
- Learn about CA natural history
- Focus on regional environments and conservation of natural resources
- Study the Nature Bowl Glossary
- Create your Enviromercial
- Practice this in front of others – multiple times!
- Try practicing in front of parents, other teachers, the PTA and school admin so students get used to practicing in front of adults.
- Plan the details of your semi-final day
- Contact your school to let them know which students will be attending the semi-finals, and on what day
- Confirm transportation arrangements (bus, parent cars, etc.) and have a back up plan
- Contact your school's public information officer or local media for coverage

Coach Preparation Checklist

Day of Event

- Dress for the weather, and a day of being outside
- Bring photo releases, snacks, lunches, and plenty of water
- Review the format and rules of the games with your team – stress teamwork
- Arrive early to your site to allow time for check-in and restrooms
- Please contact site if you will be late or unable to attend!
- Review format, rules; stress teamwork
- Stay for the entire day – awards ceremony included!

After the Event

- Encourage students to continue studying the environment and get involved in local issues and activities.
- Write an article for PTA/school newsletter about your experiences at Nature Bowl
- Recognize team at school assembly
- Share enviromercials with schoolmates

Team Preparation Timeline



Most teams start getting organized and meeting regularly in January. We suggest meeting for at least one hour a week for the 10-12 weeks leading up to your semi-final event.

Here is a suggested timeline for preparing your team:

January (1-4 meetings)

- Provide overview of Nature Bowl
- Focus on learning glossary words and increasing observation skills
- Make flashcards, have team members come up with examples
- Set up a nature trail or a nature scavenger hunt
- Pick an animal or plant - What's its adaptation?
- Focus on some key concepts - habitat, microhabitat, niche, etc.

February (4-8 meetings)

- Learn about local environmental issues. Decide on and start preparing your enviromercials.
- Teach phone/email etiquette for interviewing experts, share resources
- Discuss food chains, life cycles, water cycle
- Identify food chains from different habitats, especially oak woodlands, rivers, wetlands, conifer forest and chaparral.
- Practice bell ringers/team problems
- Play charades with environmental concepts from glossary
- List examples to illustrate flashcard vocabulary
- What can you tell from a skull, a track?

March (2-6 meetings, depending on when your semi-final is)

- Discuss native/non-native plants and animals
- What are conservation and preservation?
- Apply what you've studied on a field trip to your semifinal site, a local park, or another natural site.
- Finish enviromercials and practice, practice, practice!
- Practice nature investigations by going for a walk at the park or school ground.
- Find an animal sign, stage of a life cycle, and non-native plant
- Practice nature relay
- Practice teamwork

Late March/Early April (As needed)

- Semi-final competition at your site
- Talk to classmates about Nature Bowl experience
- Put an article in your school newsletter about the competition and list team members
- If advancing to the finals - Prepare for finals; review concepts, create your enviromercial poster

May 3rd

- Finals!

Wildlife Viewing Tips:

- Keep your pets at or inside home
- Sit down somewhere comfortable
- Avoid making too much noise
- Try to blend into your surroundings
- Be patient and respectful
- Use all your senses to listen and look for wildlife
- Stay a safe distance from and do not approach wildlife
- Avoid sensitive habitats, such as nests and dens
- Use binoculars and field guides
- Wildlife is most active at dawn and dusk
- Find edges of different habitats, or ecotones, where wildlife is most plentiful
- Don't forget to notice the micro-world of insects
- Enjoy yourself and be happy!



Resources

Nature Bowl Partners:

American River Conservancy www.arconservancy.org

California Department of Fish and Wildlife www.wildlife.ca.gov

New Melones Lake www.usbr.gov/mp/cao/newmelones/

Placer Nature Center www.placernaturecenter.org

Sacramento Valley Conservancy <https://sacramentovalleyconservancy.org>

Stone Lakes National Wildlife Refuge www.fws.gov/refuge/stone_lakes/

Sutter County Resource Conservation District www.suttercd.specialdistrict.org

Yolo Basin Foundation www.yolobasin.org

Nature websites:

Ask Nature <http://www.asknature.org/>

California Academy of Sciences <https://www.calacademy.org>

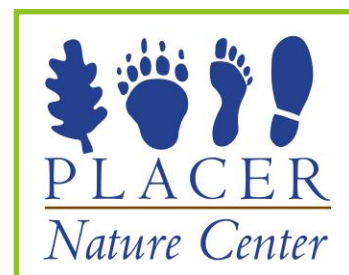
Project Wild <https://www.projectwild.org>

California Education and the Environment Initiative (EEI) www.californiaeei.org

California Regional Environmental Education Community (CREEC) www.creec.org

Local field guide:

Outdoor World of Sacramento (id and natural history; available locally)



Kahoots Games

3rd / 4th

- **Game 1:** <https://create.kahoot.it/share/cdfw-nature-bowl-3rd-4th-game-1/9d832653-879c-4545-baea-aa16cf365451>
- **Game 2:** <https://create.kahoot.it/share/cdfw-nature-bowl-3-4th-game-2/747811fa-bf34-4a1a-846e-edb3322ab8ca>
- **Game 3:** <https://create.kahoot.it/share/cdfw-nature-bowl-3rd-4th-game-3/2aa935b4-e2bc-4b5d-ad80-dec5374cfbe2>
- **Game 4:** <https://create.kahoot.it/share/cdfw-nature-bowl-3rd-4th-game-4/ecb9ea77-5ff4-4285-9af3-b3468822750c>

5th / 6th

- **Game 1:** <https://create.kahoot.it/share/cdfw-nature-bowl-4th-5th-game-1/ad02387f-f907-4bb7-865b-266bb5f64b63>
- **Game 2:** <https://create.kahoot.it/share/cdfw-nature-bowl-5th-6th-game-2/e78a9aa8-4947-4be8-830a-1578acfd03a0>
- **Game 3:** <https://create.kahoot.it/share/cdfw-nature-bowl-4th-5th-game-3/587117be-03c6-440f-9b10-b6583454ee07>
- **Game 4:** <https://create.kahoot.it/share/cdfw-nature-bowl-4th-5th-game-4/e9da0f2b-fbfd-4534-8911-f733d60f8d39>



Nature Bowl in your Neighborhood

- Let's Look at Life
- Bird Talk
- We Are Here! Here We Are!
- Nature Relay Match Up
- Count Them Up

Link at

<https://wildlife.ca.gov/Regions/2/Nature-Bowl>



Coming Soon to your Inbox



- Coach Workshop Powerpoint
- PDF Coaches Packet
- Nature Bowl Glossary
- Photo Release Form
- More Resources



SAVE

PRINT

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Nature Bowl Glossary

The glossary contains all of the terms, concepts, and big ideas that students should know ahead of their semi-final. A document with the full glossary will be sent to you and posted on the NB Website.

Abiotic: Not alive, or not derived from living organisms.

Adapted: Living organisms change over time to become best suited, or adapted, to their environment. These adaptations can be **structural, behavioral, or physiological**.

Agriculture: Human practices of raising crops and/or livestock mainly for consumption by people or livestock. Many types of agricultural practices also provide habitat for wildlife, especially in areas where native habitats are missing.

Amphibian: Cold-blooded vertebrates. Adults breathe air with lungs and through moist skin and live on land and in water.

Anadromous: Certain aquatic species, such as salmon and steelhead trout, that live in, and can breathe, both freshwater and saltwater

Aquatic: Growing, living in and/or associated with water.

Biodegradable: Materials that can decompose, or decay.

Bird: A warm-blooded vertebrate covered with feathers and having wings.

Biodiversity: The variety and abundance of different species of plants and animals.

(Biological diversity)

Biology: The scientific study of life.

Biotic: Of, relating to life and/or by living organisms.

Biotic Zone: Specific location of a specific community, or ecosystem, of inter-related life forms. Also called **Floralistic Province**. California has the most of any state.

Botany: The scientific study of plants.

Camouflage: An adaptation that enhances chances of survival for both predators and prey by allowing wildlife and plants to blend stealthy in their environment.

Carnivore: A meat eating wild animal.

Carrion: The body and flesh of a dead animal.

Carrying capacity: The maximum number of plants and animals that can be supported by a habitat or environment. The healthier the habitat, the higher number of species it can support. Healthy habitats occur when native plants and animals have all the food, water, shelter, and space they need to survive.



Central Valley: Also called the Great Central Valley, it is the second largest valley on earth! Its low elevation between mountain ranges serves as the major drainage for most of California's rivers. This landscape includes a mosaic of native habitats as well as agriculture.

Chaparral: An unusual foothill habitat, or biotic zone, of the Sierra Nevada and Coastal Range. Mostly covered by scrub of entangled evergreen bushes and few trees. With long dry summers and wet winters, plants here are adapted to fire and drought.

Climate Change: Refers to any significant change or pattern of change in the measures of Earth's climate. Climate includes temperature, precipitation, wind patterns, among others. The leading cause of climate change is the increased release of greenhouse gases, or **carbon dioxide**, in the Earth's atmosphere by the burning fossil fuels.

Any Questions?

One more time! Dates To Remember:

Workshops

- January 8: Nature Bowl Coach Workshop
- January 22: California Natural History Class for Coaches (optional)
- February 8: Project WILD Training (optional)
- March 1: Registration Deadline for all teams

Semi-Finals

- March 19 Nimbus Fish Hatchery
- March 25 American River Conservancy
- March 27 Placer Nature Center
- April 3 Stone Lakes National Wildlife Refuge
- April 9 Yolo Basin Wildlife Area
- April 11 New Melones Visitor Center

Finals

- May 3 Camp Pollock in Sacramento

Thank You!

Visit the [Nature Bowl Webpage](#) to register your team and sign up for future trainings.



Questions? Email Lacey at Lacey.Carlson@wildlife.ca.gov