

Nature Bowl 2026

Judge & Volunteer Training Packet



CDFW Nature Bowl

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Thank you for volunteering with CDFW’s annual Nature Bowl Competition! This exciting program began in 1986 and is an opportunity for kids in our community to learn about nature in a fun and engaging way. Every year, hundreds of students from 3rd-6th grade gather to test their knowledge about all things natural history – including birds, plants, mammals, ecosystems, climate change, and so much more!

In this training packet, you will learn more about what is expected of you as a volunteer, how to judge each activity, and what to expect at our competitions.

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Role of Judges and Volunteers

When you come out to a semi-final or final competition, you will be assigned to judge one of the 5 activities that day. 2-4 judges are assigned to each activity. Each round is generally 30-40 minutes long, with 10 minutes between each round. Teams rotate through activities throughout the day. To ensure scoring is consistent, judges will stick with their same activity for all rounds that day.

What to bring

- Please wear kid-appropriate clothing that is comfortable enough to spend a full day outdoors in. Closed toed shoes are highly recommended.
 - If you are a CDFW staff member, or a staff member/volunteer with that day's site, please wear branded clothing and a nametag if possible. Between the teachers and chaperones for each team, there are a lot of adults roaming around! It is nice to differentiate between staff/volunteers and participants where possible.
- Please bring water and your own lunch/snacks
- Check the weather before you come and bring sweaters/layers/hats/sunscreen etc. depending on the forecast. Nature Bowl events take place between March and May – the weather could be anything!

Before the Event

When you arrive, please check in at the registration table. You will receive a nametag and a copy of the schedule, hear an overview of the day, and can meet the other folks supporting the event. You may be asked to support with some set up, such as bringing materials to one of the activity areas or helping put out supplies. You will then be directed to your station, where you will find the materials for your activity and your score sheets and get a brief orientation of how to run that activity. If you have any questions about your activity at this time, you can ask one of the CDFW staff to help you out.

When Students Arrive

Students generally start arriving about 30 minutes before the welcoming ceremony. If any students or teachers ask you where they should go, please direct them to the registration table.

Before the first round of activities, there is a short welcoming ceremony where teams are given a brief overview of the day, directions on where to go, and some ground rules for the day. We invite you to join the welcoming ceremony so you can see the energy of the day – however, if your station is still needing some set up, or if you need time to prepare yourself before the first round begins, please take this time to do so.

During the Rounds

Each activity will have between 2-4 judges assigned to it. For most activities, judges will be working together to judge the students (sitting together at a table for a presentation, etc.). For Outdoor Investigations, judges will be working more independently, as they guide teams down a short nature trail and ask them questions.

You will be given a schedule of the day that has a list of the activities, timing for each round, and which teams should be participating at your station during each round. Coaches are responsible for bringing their teams to each station on time. Please wait for all assigned teams to arrive before you start any activities.

Welcome the teams to your station and give a brief overview of the rules for your activity. There will be a list of what to say at the front of your scoring sheet. Then, begin your activity, keeping an eye on timing. There is a section with more information on what to do at each specific activity later in this document.

When your activity is finished, please give your teams a quick time update (i.e. – Great job! You have 10 minutes until your next activity) and send them on to their next activity.

Between Rounds

There are 10 minutes between each round of activities, during which teams will be walking to their next activity, taking a break, using the restroom, getting water, etc. If you finish an activity a few minutes early, please ask the teams to stay nearby until that round is officially over, so as not to disturb the teams finishing up other activities. To ensure schedule stays on track, please do not start your next round until the official start time.

Between rounds is your time to reset your activity space, finish scoring previous rounds, and take your own bio-breaks as needed.

Lunch Break

There will be a 30–40-minute lunch break mid-way through the day for all participants. Students will be gathered in a common space during lunch so that they do not get a sneak peak at any activities they haven't been to yet. This is your break too! Please use this time to eat your own lunch, get some water, walk around, etc. If possible, please bring any finished score sheets to the scoring table during this time as well.

Some judges choose to catch up on scoring during the lunch break. Please know that this is fully optional, as each activity will also have time between rounds to catch up on scoring. Please take your breaks first!

Bye-Round

When sites have a smaller number of teams registered, the schedule will include one or two bye-rounds – a block where no teams are at your station. Bye-rounds will be assigned on the schedule. Please use this as an opportunity to catch up on scoring, give completed score sheets to the scoring table, re-set your station, and take a break as needed.

Scoring

Your activity station's set up box will include a stack of score sheets that have a list of questions and how to score your activity. Since each activity structure is a little different, the scoring is also different for each activity, so be sure to check your specific activity's rules ahead of time. **The most important thing is that your activity's scoring is consistent across all teams.** Score activities after each round with your fellow judges to make sure each team is scored fairly. Discuss responses with each other as you score, so that one team is not scored more harshly than another.

As an example – if a question is worth 3 points, discuss with your fellow judges what qualifies as a 1 point, 2 point, or 3 point response ahead of time, then be consistent with that scoring across all teams.

Please do not discuss scoring in front of the teams. Instead, score once teams have left your station.

When you have time during lunch or your bye-round, bring all completed score sheets to the scoring table for final tallies. The score keeper may come around between rounds to collect score sheets as well.

Final Tallies and Awards Ceremony

Once the final round has concluded, teams will be directed back to the common space during final tallies. Please finish your last scoring as quickly as possible and bring your remaining completed score sheets to the score keeper.

Once your final scores are turned in, please pack up your station. Place all activity materials back in the activity box, fold up tables and chairs, and break down the pop-up tent if you have one. Leave your activity station supplies in a neat pile to be picked up by cleanup crew after the awards ceremony.

The awards ceremony is the final part of the day for teams. All teams are gathered in the common space together. The event host and CDFW staff will say some thank you's for the day, and then each team will be called up one at a time and recognized for their hard work that day. The two top scoring teams from each grade category will then be called up and congratulated. At the semi-finals, the top-scoring teams will be advancing to the finals. At the final event, the top scoring teams will win a prize.

Volunteers/Judges are not required to stay for the award ceremony but are encouraged to if they can!

Clean Up

After the awards ceremony, teams will start packing up and leaving for the day and staff/volunteers will support cleaning up. Please check in with CDFW staff or host site staff for a cleanup assignment. Our goal is to "leave no trace", so please keep an eye out for any garbage, lost and found items, left-behind event supplies, etc. and clean up accordingly. Please check in with Nature Bowl staff before leaving for the day.

Semi-Finals

Semi-final events take place late March – April, typically mid-week during school days. Teams choose from a list of various semi-finals sites. There are usually between 3-6 semi-final locations, each with a different group of competing teams. While the location of each semi-final is different, the activities are the same at each semi-final. The top scoring teams in each grade category (3rd-4th and 5th-6th) from each semi-final site will advance to the finals.

Semi-finals are officially hosted by the site partner and run by CDFW. Volunteers and judges are generally a mix of CDFW interpretive staff, CDFW staff volunteers, site-partner employees, and volunteers from partner organizations.

Finals

The top teams from each semi-finals site advance to the finals, which take place on a Saturday in early May. Finals take place at Camp Pollock in Sacramento, CA; however, they are hosted by CDFW. Because of this, the set up and cleanup is more intensive than at some of our partner sites. The volunteer shift for Finals may be a bit longer than the semi-finals, to accommodate for the longer set up and clean up tasks.

The finals will have the same type of activities as the semi-finals; however, the questions and tasks will be different than they were at the semi-finals.

The top team in each grade level category (3rd-4th and 5th-6th) wins an opportunity to attend a CDFW guided adventure, such as a fish plant with CDFW fishery staff, and gets to bring home the "Golden Pinecone" award for the rest of the school year.

List of Activities

Teams compete in their grade-level category, which means 3rd-4th grade teams only compete against 3rd-4th graders, and 5th-6th graders only compete against other 5th-6th graders. At the beginning of the day, teams are assigned to groups that will go through the activity rounds together, so in each round, you are only working with 2-4 teams at a time.

Generally, the activity questions vary slightly between grade levels, but the format of each activity remains the same. Judges must be sure they are using the correct score sheet for each grade level during activities.

Speedy Ringers

Speedy Ringers is a “game show” style activity. The competing teams are each placed at a table with their team’s name and a bell to “ring in” their answers. Only 3 members of each team may play at any given time, however, there will be opportunities for teams to sub members out throughout the game.

Teams are presented with short answer questions and answer on a “first-ring” basis. Each team has a buzzer contraption with sound or a bell to signal in. The team who signals in first is called upon to answer. The first team to correctly answer the question gets the point for that round. This is the only activity where all teams are competing for the same group of points. The highest score goes to the team that correctly answers the greatest number of questions and so on.

How to Judge Speedy Ringers

Before students arrive for a round, set out the team’s name placards for that round’s participating teams, and make sure you have the question sheet that matches the grade levels participating in that round.

Welcome students to the activity and read off the rules provided with the question sheet. Remind parents/coaches that they may watch quietly, but they may not help their students answer questions.

Ask questions in the order provided on the question sheet. The team who signals in first is called upon to answer. The person who rang the bell must start answering within 3 seconds – only one student answers the question for their team. No discussion amongst the team is allowed once the bell is rung.

If that student can't come up with the answer within three seconds, or if the answer is incorrect, then the team that rang in second is called upon. An individual from the second team can then answer the question, following the same rules as above. If they fail to answer correctly within the time limit, the judge will move on to the next team to ring in, and so on.

If another team does not ring in, read the question a second time, and give the teams who have not responded another chance to ring in.

If no one can answer that question after two tries, no team will get those points. You may read out the correct answer and move on to the next question.

Important: If a student answers incorrectly, their team is “out” for that question. They may not ring in again until the next question.

Sometimes it’s difficult to tell who rang-in first. In this case, we will have all the teams who rang-in write their answers on a piece of paper. Each team that answers correctly will get points.

Some questions are more open ended (i.e. – name two features of this ecosystem, etc.), and the answer sheet will have multiple suggested answers that students could say. Use your best judgement to determine if a student correctly answered the question or not.

After all questions have been asked, tally up the scores for each team. The highest score goes to the team that correctly answers the greatest number of questions and so on.

In the event that there are an odd number of teams participating (i.e. 3 teams in one group vs. 4 teams in another group), the total number of questions asked to each group will be adjusted so that the ratio of questions available per team participating remains the same. *For example, if there are 60 total questions being asked to the group of 4 teams, 45 questions will be asked to the group of 3 teams. In this way, there are 15 questions available per team.* This adjustment, and which questions will be pulled for the smaller groups, will be determined by NB staff ahead of time.

Outdoor Investigations

In this activity, a short nature trail is set up with a series of 4-5 questions along the trail. The emphasis of these questions is on observation skills, natural resource knowledge, and teamwork, with some questions specific to the environment found along the trail. 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 something representative of the area. 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 and the judge will ask the question and write down the team's responses without further prompting.

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.

How to Judge Outdoor Investigations

Three to four judges will be assigned to this station. For each round, judges will each take one team down the trail. Teams will rotate through the questions, so that only one team is at a question site at a time. Discuss which station each judge will start at ahead of time. (for example, one judge will start at question 1, another will start at question 2, and so on).

Make sure that you are using the question sheet that matches the grade level participating in that round. When teams first arrive, explain the rules provided on the question sheet to the full group. Assign each team to a judge and make your way to your first question.

At each station, you will be responsible for asking the questions as written, and writing down the students' responses. Please write down their responses as detailed as possible, in case another judge ends up grading for you.

Each question will have a time limit, so be sure to set a timer before asking the question. You may repeat the questions as many times as students need, but you may not elaborate on the questions or provide additional context/prompting. Try to use a "poker face" so as not to lead students to a more correct answer. Students may not see the question paper. After the time limit is up for that question and the student's responses are "locked in," you may provide the correct answer.

If another team is still at your next station when you are ready to move on, patiently wait with your team until the station clears. Keep an eye on the time so that you finish the trail by the time the scheduled round ends.

You will be provided with a master sheet with answers for all responses. After you have completed a trail and the team has left the station, you can grade the team's answers. Please discuss scoring with your fellow judges so that all teams are scored fairly (For example, if a question is worth 3 points, and a team partially answered it, discuss with your fellow judges how to score that response).

Nature Relay

In this “relay” activity, items representing environmental concepts from the Nature Bowl Glossary are placed in a large saucer. Each team competing in a round will line up in front of their own saucer (each saucer contains the same items). Team members line up opposite the saucer and one at a time, speed walk to the saucer to retrieve items that represent the 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. All team members are encouraged to participate.

How to Judge Nature Relay

Before teams arrive for a round, make sure that the saucers contain the correct items for the grade level participating in that round, and that you have the correct list of questions for that round’s grade level as well.

When teams arrive, welcome them and briefly explain the rules provided on the question sheet. Allow all teams 10 seconds to glance at the items in the saucers before beginning the game. Assign each team to a saucer and have them line up at the starting line.

Remind coaches that they may quietly observe but may not participate or guide students during the round.

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, announce the correct item answer. Teams with the correct item get full points.

If a student selects a different item than the “correct answer”, that student may defend/explain their rationale for that selection to the entire group. The judge will then determine if the student’s defending rationale of the item deserves a full point, half point, or no points.

After each question, the items are returned to the saucer and that round’s team member goes to the back of their line.

Ask questions in the order listed on the question sheet. Try to get through all the questions before the round’s scheduled time limit is up.

Team Problem Solving

As the title suggests, in this activity teams will be presented with several 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.

How to Judge Team Problem Solving

Before each round, make sure you have the question sheet and props for the next round's grade level ready to go. Set up the name placards for the participating teams at the tables ahead of time.

Welcome students to the activity and briefly explain the rules written on the question sheet. Remind coaches that they may quietly watch but may not be seated at the team tables and may not coach students during the rounds.

Hand out the response sheets to each team and have them put their team's name at the top of the sheet. Then, begin asking the questions on your prompts sheet. Each question will have a time limit, so be sure to announce how much time teams have to answer and set a timer.

Some of the questions will ask students to arrange a set of props or give a short presentation about something. For these questions, after the team has had time to work together to form their response during the time limit, they will choose one team member to present their answer to the larger group.

For questions that ask for just a written response, and that have more of a "correct" answer, it is important that you wait until all response sheets are turned in before giving out the correct answer.

You will be provided with a master sheet with answers for all responses. After you have completed a round and the team has left the station, you can grade the team's answers. Please discuss scoring with your fellow judges so that all teams are scored fairly (for example, if a question is worth 3 points, and a team partially answered it, discuss with your fellow judges how to score that response).

Enviromercial

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. Students are encouraged to **gain first-hand information** by visiting a site, interviewing people, attending a meeting and/or being part of a solution.

**Local can mean issues that impact all of California, or that are more specific to their city, neighborhood, or school. If students choose a broad issue, such as air quality, they must be prepared to focus the enviromercial on the local impacts of this issue.*

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, 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 and provides the judges with evidence of research, team involvement, and actions taken.

How to Judge Enviromercial:

You'll be given a rule sheet as well as a judging rubric at your station for each team. Be sure to review the rules and rubric before teams arrive.

Welcome all teams to the activity and discuss how the activities will go. Decide on the order that teams will present their enviromercial in (you can have them pick a number, pull sticks, etc. or just go based on who volunteers first). Discuss with the teams what it means to be a respectful audience – when one team is presenting, everyone else should be quietly listening and clap when the team finishes.

When the first group is ready to go, they should hand you their Judges Packet and then set up whatever they need for their presentation. When they are ready to present, set a timer for 2 minutes and watch their presentation. After they have finished their presentation, take a few minutes to ask them questions about their enviromercial, such as what research they did, if they took any actions after learning about the issue, what they learned, etc. After questions have concluded, judges should take a minute to quietly write down their preliminary scores and then call the next team up.

Once all teams have presented and been dismissed, take some time with your panel of judges to discuss how each team did to determine final scores. If judges all agree on a score (i.e., 8/10 for choice of topic) then that will become the final score for that section. If you disagree on any scores (i.e. one judge scores a category at a 5/10, while another judge scores it at a 7/10), then the final score will be the average between the disputed scores.

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 they work together well?
- Resources: Diverse, credible, local or regionalized, different perspectives
- Action: Has the team demonstrated concrete actions (past, present, or future) that will make a difference regarding their topic?
- 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

Special Activities for Finals Only

For teams advancing to the finals, Outdoor Investigations, Nature Relay, and Team Problem Solving will follow the same format but with different, slightly harder questions. Two new activities will be added to extend learning and provide a new challenge for participants.

Enviromercial Poster Session

During the finals, teams will not be presenting their enviromercial as a presentation as they did in the Semi-Finals. Instead, teams will prepare their issue, research, and actions as a poster to be posted at the finals, science-fair style. At the beginning of the day, all posters will be displayed in the main gathering space at Camp Pollock, and they will remain there all day. Throughout the day, all teams are encouraged to view the posters and learn more about what issues their fellow competitors worked on over the last few months.

The official Poster Session will happen at the end of the day, once all other activities have concluded and while scores are being tallied. All teams will stand by their poster and a small group of judges (one team for 3rd/4th, one team for 5th/6th) will walk through to talk with each team. Teams will have 3 minutes to present their issue and discuss their research and solutions with the judges. The scores from the poster sessions will then be included in the final scores for the day. Posters must be either a regular or trifold posterboard.

Judging criteria for the poster session will be provided to judges before the finals take place.

Climate Change Jeopardy

During finals, students will participate in an additional activity – Jeopardy. This game will be similar to the Jeopardy game we see on TV, with a few rule changes to adapt it for Nature Bowl.

How it Works:

To determine which team goes first, a judge will choose a number 1-20. The team that guesses the closest number will go first.

Jeopardy will begin when the first team picks a category and points amount from the board. The question will be read, and the team will have a chance to answer. Teams will be given a specific amount of time to discuss the question amongst themselves before answering. If they answer correctly, they will win the points. If they guess incorrectly that question will go to the next team in line. If the second team doesn't get it, the question moves to the third team and so on. If no teams can answer the question, it goes back to the first team for one last chance. After that, the game moves on to a new turn/question.

Teams are encouraged to discuss answers amongst themselves and not just blurt things out. Answers should be provided in the form of an actual answer, and not as a question like on TV (for example, say "Irrigation" and not "What is Irrigation").

Additional rules will be provided to the teams advancing to finals shortly after the last Semi-Final event and will be provided to the judges supporting finals ahead of time as well.