NATIONAL CONSERVATION FOUNDATION

2020 Virtual Envirothon Events

Testing, Training, and Oral Presentation Recommendations

Despite the challenges of the COVID-19 pandemic, there were 17 states and provinces that were able to host an online Envirothon event in 2020. Some of these events were official competitions, others were informal challenges, along with social media engagements and training activities. These states and provinces gained valuable experience conducting distance education and engagement through online platforms that can help inform your plans for conducting a virtual Envirothon competition.

I.   2020 Envirothon Event Overview

Online official team-based competition (9):

- Connecticut: Google Classroom

- Florida: Google Forms, Google Slides, Zoom *(for Welcome/Awards)*

- Idaho: QuestionPro, Google Slides, Zoom, YouTube *(for Training Videos)*
- New Mexico: Website and Zoom

- New York: Google Classroom

- Ohio: Zoom and Google Forms *(with Timify.me add on)*

- Oregon: Google Slides, Various platforms for OP Video submissions, Zoom *(for Awards)*

- Rhode Island: Zoom and Google Forms

- Utah: Zoom and Qualtrics

Online Informal Challenge (5):
- Massachusetts: OP Challenge uploaded to YouTube

- Kansas: Multiple choice Quia.com *(for testing)*, Excel *(for organizing teams)*, Google Slides & Facebook *(for promotion)*

- Virginia: ClassMarker

- Pennsylvania: Google Forms

- South Carolina: Google Forms

Social media engagement or other activity (3):

- Ontario: YouTube, iNaturalist, Social Media, Google Forms

- Texas: Facebook

- Wisconsin: Facebook

II.   2020 Platforms

The following is a summary of findings and feedback about the **major** testing and training platforms used for the 2020 Virtual Envirothon Events:

Google Forms   https://www.google.com/forms/about/

Recommended by: Pennsylvania Envirothon, South Carolina Envirothon, Rhode Island Envirothon, Ontario Envirothon, Florida Envirothon, Ohio Envirothon *(with timify.me add-on to monitor time)*

Description: Easy-to-build forms for constructing tests, with options for different types of questions, automatic and manual grading, and ability to include pictures and video

Cost: Free

Overall Ease of Use: Easy

Features:

- Multiple Choice Questions
- Multiple Select Questions (more than one correct answer)
- Drop down menu questions
- Short Answer Questions
- Essay Questions

- File Uploads (with restrictions – files are uploaded to the test creator's Google Drive, and respondents must be signed into Google to upload files)
- Automatic grading for Multiple Choice, Multiple Select, and brief Short Answer questions (one or two words)
- Manual grading within Google Forms for Short Answer and Essay questions
- Ability to provide immediate feedback to students for automatically graded questions
- Ability to send out grades via email after manually grading questions
- Partial Credit available for manually graded questions

Advantages:

- Most students are familiar with Google Forms
- Scoring for Multiple Choice and very specific short answer can be done automatically
- Feedback from automatic scoring can be made immediately available to the students or released when you choose
- Short Answer/Essay Questions must be graded within the program manually, but will be automatically included in the score (Google Forms will calculate team's final score)
- Partial credit available for manually graded questions
- Test results can remain private until released via email to participants
- Statistics and data can be easily generated and exported to Excel
- Students do not need a special account to access (just a regular email address)
- Images can be included in questions (good for identification questions, et cetera)
- Multiple Collaborators can be added per form/test for multiple test writers and scorers

Disadvantages:

- Does not allow for timed tests unless you use an add-on program (Ohio Envirothon used timify.me add-on to monitor test time - https://quilgo.com/education)
- No built-in way to monitor students to ensure rules are being followed
- If auto-grading short answer, answers must be exact or they will be counted as incorrect (including misspellings, different spacing, et cetera)

- Does not have ability to receive Oral Presentation submissions without participants signing into Google
- Some agencies cannot use Google services

Google Classroom https://edu.google.com/intl/en/products/classroom/

Recommended by: Connecticut Envirothon, New York Envirothon

Description: Online learning management system with access to most Google services, including Forms for test creation, YouTube for video uploads, and Google Meet for video conferencing.

Cost: Free for qualifying educational institutions, others may be eligible for G Suite for Nonprofits (https://www.google.com/nonprofits/offerings/apps-for-nonprofits/)

Overall Ease of Use: Easy

Features:

- Central dashboard viewable by all students to post announcements
- Training materials and tests can be organized by subject
- Access to Google Forms and other Google services

Advantages:

- Central location for training and testing materials
- Most students are familiar with Google services
- Reference materials can be made simultaneously available with tests (for example, identification keys)

Disadvantages:

- Like with Google Forms, it is not possible to time a test without additional add-ons
- No built-in way to monitor students to ensure rules are being followed
- Some agencies cannot use Google services
- Unable to add sound files (for wildlife calls)
- Students must have an email address to sign in (Gmail addresses work best)

Zoom   https://zoom.us/

Recommended by: Rhode Island Envirothon (breakout rooms for testing, awards ceremony), New Mexico Envirothon (oral presentation and awards ceremony), Oregon Envirothon (awards ceremony), Florida Envirothon (welcome and awards), Ohio Envirothon (oral presentation and awards), Idaho Envirothon (welcome, platform for teams to confer during testing, recorded station training, awards), Utah Envirothon

Description: Online meetings, webinars, and groups with video and audio capability for hosts and participants.

Cost: Varies, depending on plan and features - https://zoom.us/pricing

Overall Ease of Use: Easy

Features:

- Video conferencing platform
- Meeting or Webinar setups with different features
- Option for breakout rooms for smaller groups
- Potentially large capacity for meeting/webinar (depending on plan)

Advantages:

- Video and audio capability
- Screenshare capability
- Oral Presentations can be done live, with all students and judges present and opportunity for Question and Answer session following presentation
- Can use breakout rooms for teams to confer; team captain can leave breakout room to ask questions to station leaders/test writers, and then return to breakout room
- Breakout rooms can be set to close at a predetermined time
- Hosts (station test writers/monitors) are able to visit breakout rooms at any time to monitor students' activity

Disadvantages:

- Requires stable internet connection and adequate bandwidth for all participants, particularly for video
- Depending on your feature requirements, can be expensive

YouTube   https://www.youtube.com/

Recommended by: Ontario Envirothon, Massachusetts Envirothon,
Idaho Envirothon (recorded station training)

Description: Platform for video uploads and viewing

Cost: Free

Overall Ease of Use: Easy

Features:

- Pre-recorded videos can be set to become immediately available, or scheduled through YouTube Premier

Advantages:

- Easy to host videos
- Videos can be public or private
- Most students are familiar with YouTube
- Could be used for recorded training sessions or student oral presentations
- Recorded training sessions made publicly available may help to market your Envirothon program and provide additional resources for Envirothon advisors

Disadvantages:

- If used for Oral Presentation, no opportunity for Question and Answer session with judges
- Students or trainers must have recording equipment (which could just be a smartphone)

ClassMarker   https://www.classmarker.com/

Recommended by: Virginia Envirothon

Description: Online testing platform

Cost: Varies, depending on plan and features
https://www.classmarker.com/online-testing/price/education/

Overall Ease of Use: Easy

Features:

- Variety of question types (with limited short answer/essay capability)
- Automatic scoring
- Ability to place time limits on tests
- Ability to include images in test questions

Advantages:

- Ability to give partial credit
- Built-in test timer

Disadvantages:

- Limited short answer/essay question capability
- Does not allow file uploads from participants
- No built-in way to monitor students to ensure rules are being followed

Google Slides   https://www.google.com/slides/about/

Recommended by: Oregon Envirothon (testing), Florida Envirothon (student oral presentations), Idaho Envirothon (student poster presentations), Kansas Envirothon *(event organized and hosted by Horton High School FFA chapter)*

Description: Presentation program similar to PowerPoint offer by Google

Cost: Free

Overall Ease of Use: Somewhat Easy

Features:

- Create and share slideshow presentations with multiple collaborators

Advantages:

- Each team has their own unique link
- Free for students to access, who may not have access to Microsoft PowerPoint

Disadvantages:

- No automatic scoring
- Sharing settings must be specific if submitting a presentation via a link

Question Pro   https://www.questionpro.com/survey-software.html

Recommended by: Idaho Envirothon

Description: Survey platform that can be used to create quizzes

Cost: Free and subscription versions - https://www.questionpro.com/pricing/

Overall Ease of Use: Easy
Features:

- Many types of questions available (Multiple Choice, Multiple Select, Short Answer, et cetera)
- Responses can be exported to Excel

Advantages:

- Easy to use platform – similar to Survey Monkey, but easier to construct questions

Disadvantages:

- No autoscoring available for free version
- Free version will only let you send out one email at a time with the survey link (Idaho Envirothon found a work around by emailing it to an administrative account, and then email the participants the link from that email.)

Quia Web   https://www.quia.com/quicktour.html

Used by: Kansas Envirothon *(event organized and hosted by Horton High School FFA chapter)*

Description: Online platform for learning games, quizzes, and testing

Cost: $99/year - https://www.quia.com/subscription/

Overall Ease of Use: Somewhat easy to somewhat difficult

Features:

- Learning Games
- Online Testing

Advantages:

- Several question types for quizzes
- Automatic grading of most questions

Qualtrics   https://www.qualtrics.com/

Used by: Utah Envirothon

Description: Survey platform

Cost: Free (with limited features) and subscription versions

Overall Ease of Use: Somewhat easy

III.   Considerations for Rule Compliance

Please note that not all of these options may be possible depending on your local regulations and recommendations on group gatherings. Please consult your state/provincial health guidelines for schools and in-person group limits.

- In-person proctor – Team Advisor or impartial third party
    - Only feasible if students are able to gather in person as a team
- Virtual proctor – Team Advisor or impartial third party
    - Can be used if students are not able to gather in the same location
    - Proctor may join on Zoom call, Google Meet, or whichever platform students are using to communicate with each other
    - If all students have their cameras turned on, proctor can monitor what the students are doing to ensure no reference materials are being used
    - Proctor unable to monitor any activities offscreen
    - Used by Rhode Island Envirothon and Idaho Envirothon with Zoom breakout rooms
- Recording of student meetings
    - To eliminate the need for a proctor to be present for the entire testing period, students may be required to record their virtual meeting and submit it for review if concerns arise
    - Used by New York Envirothon
- Add-on programs to monitor internet usage
    - Available with various features and varying costs

- o May only work for certain browsers or certain platforms
- o Unable to monitor cell phone usage
- Question structure
    - o Questions on tests may be designed so that answers are not easily searchable on the internet
    - o Application questions are a good option for this
    - o This does not necessarily mean that your questions must be short answer – application questions can be multiple choice as well
- Timed tests
    - o If students must complete a test in a certain amount of time, that limits the potential for looking up answers (as it can be a time-consuming process)
- Test structure
    - o In some platforms, tests can be designed so that they must be completed in sections, and students cannot return to a previous section, thus limiting the ability for students to look up the answers to all the questions they didn't know at the end of the test
    - o Used by Florida Envirothon
- In-depth questions for Oral Presentations
    - o If students are allowed to use outside resources (internet or study materials) to prepare for the Oral Presentation, judges can ask in-depth and detailed questions to make sure the students actually understand the material instead of copying directly from a resource

IV.   Contacts

To learn more about a particular state or province's competition/challenge methods and platforms contact them at:

State/Province	Name	Email
Connecticut	Christopher Sullivan	csullivan@conservect.org
Florida	Dawn Walker	dwalker@scienceeye.com
Idaho	Steve Smith	Steven.Smith@deq.idaho.gov
Kansas (Horton HS FFA)	Alex Bartel	a.bartel@holtonks.net

Massachusetts	Brita Dempsey	massenvirothon@gmail.com
New Mexico	Peter Vigil	pvigil@tswcd.org
New York	JoAnn Kurtis	nys.envirothon.2020@gmail.com
Ohio	Wendee Dodds	wzadanski@jeffersoncountyoh.com
Ontario	Allison Hands	ahands@forestsontario.ca
Oregon	Julie Woodward	woodward@ofri.org
Pennsylvania	Lorelle Steach	lsteach@envirothonpa.org
Rhode Island	Peter Stetson	petestetson8@gmail.com
South Carolina	Brooke Myres	MyresB@dnr.sc.gov
Utah	Carrie Milligan	carrie.milligan@usu.edu
Virginia	Bonnie Mahl	bonnie.mahl@vaswcd.org

V.   Attachments

The following pages include a sample of surveys from some of the states and provinces who conducted online Envirothon competitions or challenges. These pages include some detailed reports, specific feedback about the platforms used, and event outlines.

What is your state/province?	**New York**
What type of virtual Envirothon event did you host? (Check all that apply.)	- Competition (an official winner for state/province was selected)
Did your virtual event include an Oral Presentation component?	- No

Please provide a brief description of your event:
We used Google Classroom and created 5 classes-one for each Envirothon subject. We then created a 25 multiple choice test using the quiz function in Classroom. We had each participating teams create a specifically named gmail accounts and asked only the team captain to log into the classroom. All other team members then joined the captain in a virtual meeting using Zoom or Google meet and the meeting was to be recorded. Team advisors were asked to proctor their team to ensure adherence to the rules. Each test was then released to the classroom on a previously announced schedule and the teams had 20 minutes to complete it. All tests were released in succession with a few minutes between each one. Three NY State Envirothon Committee members monitored the Classroom to "troubleshoot" any issues that arose.

What platform did you use for your online event?	Google Classroom
What was the cost of using this platform?	Nothing

How easy was this platform to use?

Overall	Very Easy
Interface	Very Easy
Question Writing	Somewhat Easy
Multiple Choice Questions	Somewhat Easy
Short Answer Questions	N/A
Test Scoring	Very Easy
Oral Presentation	N/A
Oral Presentation Q&A	N/A
Distribution to Teams	Very Easy
Submissions from Teams	Very Easy

What features did you like about this platform?
The automatic scoring of the tests and then the ability to export the scores to Excel for later compilation of all 5 tests to determine the overall winner.

What were the drawbacks to this platform?
Could not add sound files for wildlife test questions, picture quality needed to be high since students were relying on pictures to determine answers, misspelled words count as wrong answers.

Would you use this platform again? Why or why not?
Yes. The ease of setting up a test outweighs any negative feature. Will plan on using this format as a backup for an "in-person" event if weather or other conditions trigger the need to move the event indoors.

If you hosted a competition or challenge, how did you monitor that the rules were being followed?
Each test question was reviewed prior to the event to see if it was easily answered using outside resources; if easily answered using Google, the question was reworded. Each test was limited to 20 minutes; thereby making it difficult to cheat and still complete in time. We then asked the teams to record their virtual meeting and then randomly asked to have then sent for review.

Other Comments (Including anything you think may be useful for other states/provinces using this platform or method)
I will email the link to the Google Classroom that was created and can send the google docs tests.

What is your state/province?	**Ohio**
What type of virtual Envirothon event did you host? (Check all that apply.)	- Competition (an official winner for state/province was selected)
Did your virtual event include an Oral Presentation component?	- Yes

Please provide a brief description of your event:
Online Test:
The tests were google-based. 20 questions for each station. Each test had its own link and the links were emailed to the team captains only. Each test had a 20-minute time limit and had to be completed once it was opened. The tests could not be re-opened once the link was clicked. The tests were available to be taken from May 6 - 8, so that teams had the opportunity to decide when it was easiest for them to get together remotely to take the them.

It was up to each team to decide how they would coordinate with each other remotely. Our state association has a Zoom subscription, so we offered it to teams to use in case they didn't have an online meeting platform. We also offered them the opportunity to use it to practice working together over an online platform.

Team captains opened the tests and shared it with team. We provided a link to a practice test.

Also included a google-based 'grievance form' in case there were any issues with question content, to be filed by one hour after the close of the online test.

Oral Presentations:
The top six teams moved on to the OP part of the competition. We kept the dates the same as what our state event would have been.
Teams had to register with a google registration form, so that we could ensure that eligible students were participating.
The students were asked to prepare a five-minute presentation on a given scenario to be presented over Zoom before a panel of three judges. They were allowed to use power point, prepare a video, or do a speaking presentation. They were also permitted to use online and written resources. They also had to cite sources for any pictures used.

The scenario was released to the teams during a Zoom call on Monday morning. We used a digital wheel (like the 'Wheel of Fortune' show wheel) to randomly choose the order of presentations. Following the Zoom meeting, team captains were emailed the scenario and any resource materials (soils map and soil survey link). Their teams then had 24 hours to prepare the presentation.

Teams were required to email in their final presentations and photos of note cards, etc. by 9 AM on Tuesday morning. This was to ensure that all teams had equal preparation time. Two Ohio Envirothon Committee members were in the Zoom judging room to follow along and ensure that no changes were made after their submission.

The judging sessions were scheduled for Tuesday, from 12 to 3 PM, in half hour blocks. In each session was: the team, a time-keeper, two representatives from Ohio Envirothon, three judges, and the advisor(s) if the team chose to have them there.

We asked that the judges were to have an in-depth question period based on a team's presentation. In this way, they could get a better idea of if the team members had actually learned something, or merely copied it from the internet or were helped by their advisors.

Awards:
Virtual awards ceremony with a video awards announcement. The CEO of our state agency and sponsors announced the winning teams.

Bandannas for all participating teams and their advisors, judges and alternate judges, the committee volunteers and sponsors.

First Place: Each team member $100 and an additional $300 awarded to the team.
Second Place: Each team member $75, and an additional $300 awarded to the team.
Third Place: Each team member $50, and an additional $300 awarded to the team.

What platform did you use for your online event?	Google Forms with the Timify.me add on. Students were instructed to use Zoom or another video chat software to take the test as a group.
What was the cost of using this platform?	Google= free. Timify.me is $6 a month for 1500 tests per month. $0 per month

	for 100 tests/month

How easy was this platform to use?

Overall	Very Easy
Interface	Very Easy
Question Writing	Very Easy
Multiple Choice Questions	Very Easy
Short Answer Questions	Very Easy
Test Scoring	Somewhat Easy
Oral Presentation	N/A
Oral Presentation Q&A	N/A
Distribution to Teams	Very Easy
Submissions from Teams	Very Easy

What features did you like about this platform?
Tests were easy to set up, although you couldn't change formatting of text, link to pdfs or videos, or link multiple test questions back to one image. Sending links out to students was also easy.

What were the drawbacks to this platform?
Having to set up a google account; not being able to change formatting of text, link to pdfs or videos, or link multiple test questions back to one image

Would you use this platform again? Why or why not?
Yes, with just the few downsides overall it was easy to create the tests and link with timify.me to time the tests

If you hosted a competition or challenge, how did you monitor that the rules were being followed?
Tests: There was no real way to 'police' the rules, but we used this statement in our written materials to teams:

We realize that this is a much different way to organize the competition than all of us are used to. Unfortunately, this will not be perfect, as there is no foolproof way to control those components of the competition that we have the ability to during in-person events. In these unprecedented times, we will be relying on all of you to maintain the standards of honesty and integrity that have always been a hallmark of Ohio's Envirothon teams!

Oral Presentation: Again, there was no real way to police the students during their preparation period. For this reason, we stressed that the judges were to have an in-depth question period based on a team's presentation. In this way, they could get a better idea of if the team members have actually learned something, or merely copied it from the internet or were helped by their advisors.

**Ohio Envirothon Test Instructions
for Team Captains example:**

Envirothon Team Captains,

Welcome to Ohio's first (and hopefully only!) "virtual" Envirothon! As many of you who have participated in the past know, we love our natural resources in Ohio and we love the Envirothon, so we really wanted to find a way that your teams could still participate.

The online test will consist of 100 questions, covering the five resource areas of: Aquatics, Forestry, Soils, Wildlife and this year's Current Environmental Issue: Water Resource Management – Local Control and Local Solutions.

The **six** top scoring teams will be asked to develop and submit a five-minute presentation that will be judged virtually. Of those six, the top **three** teams (using both the online test and presentation score) will receive awards.

All of our "virtual" Envirothon participants will receive a bandana commemorating this event!

Testing Guidelines are as follows (please read carefully):

1. The Team Captain is the contact person for the test. The Team Captain will access the test and select the answers to the test questions, with input from other team members via screen-sharing using an online facilitation platform (Zoom, etc.) that your team is familiar with and comfortable using. It will be up to your team to decide how you will coordinate with one another remotely.

2. The test questions will be able to be answered and submitted by the Team Captain ONLY. If another team member tries to open the link, the test will lock.

3. The online test will be available from **8 AM Wednesday, May 6 through 8 PM Friday, May 8, 2020**. Your team will determine when you want to complete the test within the scheduled timeframe.

4. Each of the five resource areas (stations) will have its own 20 question test. **Once the link to a station test is opened, the test must be completed**. The link to the test will **not** be able to be re-opened once it has started. Testing links can be found on the last page of these instructions.

5. **Each station test will be timed, and teams will have a maximum of 20 minutes to complete each of the five tests**. You should plan for a maximum of 100 minutes of total potential testing time when setting up your online collaboration platform.

6. We have prepared a sample 'test' for your teams in order to help you organize how you will work together remotely. The sample 'test' can be accessed using the following link: https://forms.gle/3HToCEh8tjnnz5Jf6

7. Remember, **testing begins** and **timing starts** once a testing link is **opened**. Please make sure your team members are already in your online collaboration meeting and ready to get to work **BEFORE** you click on the link to open the test, or you could risk losing precious time to complete it.

8. The testing platform is Google-based. For ease of use, it is recommended that the device being used to open the test is affiliated with a gmail account.

9. Please make sure that the equipment you are using to take the test (computer, etc.) is plugged in to prevent battery failure during the timed test.

10. Any resource material necessary for answering a specific test question is included in the email you received (Soil Survey of Paulding County). The use of calculators is permitted.

11. If you are experiencing technical difficulties with the links or test, please contact: Emily Heppner: emily.heppner@agri.ohio.gov

12. As is the rule with all levels of Envirothon field testing, your teams are NOT to use any outside resources to assist you in completing the online test questions during the test. Advisors are NOT to assist your team during test taking in any way.

13. In a typical Envirothon, there is a "grievance" process in place. Unfortunately, some situations will be out of our control using an online format. However, if you have a "grievance" that involves a particular question or answer choice, please have your Advisor submit any grievances using the following link: https://docs.google.com/forms/d/e/1FAIpQLScuuSsOwXPFd4vqGM3fd3fTinED_owC9H AGs788HWH2ZSnf4A/viewform?usp=sf_link
All grievances must be filed by **9 PM on Friday, May 8, 2020**.

We realize that this is a much different way to organize the competition than all of us are used to. Unfortunately, this will not be perfect, as there is no foolproof way to control those components of the competition that we have the ability to during in-person events. In these unprecedented times, we will be relying on all of you to maintain the standards of honesty and integrity that have always been a hallmark of Ohio's Envirothon teams!

The Ohio Envirothon Committee is very excited to be able to offer this testing opportunity to your teams. We hope that you learn a lot, continue to take an interest in natural resources and the environment, and have fun!

If you have any questions, please email: Wendee Dodds, wzadanski@jeffersoncountyoh.com

Sincerely,

The Ohio Envirothon Committee

Testing Links Below….

Oral Presentation Guidelines (please read carefully):

1. The Oral Presentation preparation and judging will take place June 8 – 9, 2020.

2. Teams will be given a presentation scenario based on this year's Current Environmental Issue: *Water Resource Management – Local Control and Local Solutions*. The link to learning objectives and study resources can be found here: https://envirothon.org/the-competition/current-competition/

3. The Team Captain will again be the contact person, and will receive the presentation scenario at the email address that was provided to us for the online test. If the email provided was a school email that you will no longer have access to once school is out, please email wzadanski@jeffersoncountyoh.com with an updated email address.

4. **The scenario will be presented to all six teams during a Zoom meeting scheduled for Monday, June 8ᵗʰ at 9 AM**. During the meeting, we will hold the drawing to determine what time your team will present the following day. There will also be a period for questions. The meeting is for team members only.

5. Immediately following the Zoom meeting, the written scenario and any relevant resource materials will be emailed to Team Captains. Team Captains will also be sent the Zoom meeting information for your presentation time.

6. Your team will have **24 hours** to prepare your presentation, and it will be up to you to decide how you will coordinate with one another remotely. You may choose to use power point to assist you in your presentation, or make a five-minute video. You may also choose to simply use notecards to assist with your verbal presentation. **All five team members must participate to be eligible for awards**.

7. **All teams must turn in their final presentations via email by 9 AM on Tuesday, June 9, 2020 to the following email address: envirothonohio@gmail.com
    If your team is using notecards or other written materials to assist you in giving your presentation, clear photos of those must be emailed in as well**. This is to ensure that all teams have equal preparation time. Presentations may not be changed after they have been submitted.

8. **Presentations and judging are scheduled for Tuesday, June 9th, from 12 to 3 PM.** The presentations will be recorded. Your team is asked to arrive in the Zoom "waiting room" five minutes prior to your presentation time.

9. Your team will give your five-minute presentation via a Zoom meeting set up by the Ohio Federation of Soil and Water Conservation Districts (OFSWCD). The judging panel will be comprised of three judges. In addition to the three judges, a time-keeper will be present in the Zoom presentation "room", as well as two representatives from the Ohio Envirothon Committee and your Advisor, if you so choose. The representatives from the Ohio Envirothon committee will be following along with your presentation to ensure that nothing has been changed from the final version your team submitted.

10. The timing of each team's presentation will be monitored by the time-keeper, who will instruct you when to start. Teams will receive a 10-point reduction for a presentation that is less than 4 minutes or more than 6 minutes. At 4 minutes, the timekeeper will show a green card. At 5 minutes, a yellow card, and at 6 minutes, your team will receive a red card and be asked to stop.

11. Your team should be prepared to answer questions on your presentation. The question session will be in-depth, to help determine the level of learning that has been achieved on the material that your team has presented.

12. Judges will not know which school you are from. Please be sure not to identify your school with shirts, references during your presentation, etc.

13. The final Oral Presentation score will be an average of the judges' scores. To determine the competition winners, online test scores will be combined with the Oral Presentation scores.

14. The awards schedule is as follows:

    First Place: Each team member will receive $100 and an additional $300 will be awarded to the team.

    Second Place: Each team member will receive $75, and an additional $300 will be awarded to the team.

    Third Place: Each team member will receive $50, and an additional $300 will be awarded to the team.

    The original intent of the team awards was to provide money to be used towards a team experience such as kayaking at a state park, a team trip to the Wilds, etc. However, with the uncertain times that we are experiencing, we are leaving it up to each team to decide how you will use the funds.

15. You may use written or online resources to assist with preparation. Please credit any photos, etc. used in your presentation.

16. Please remember that **this is a team activity only**. Advisors, resource professionals, or other individuals are not to assist your team with preparation of your presentation in any way.

17. If your team is unfamiliar with the Zoom platform, the Ohio Federation of Soil and Water Conservation Districts (OFSWCD) has a subscription available. Please email Janelle Mead if your team needs to schedule a practice session to be better prepared to share your presentation via the "share" screen, etc. Janelle can be reached at: jtmead@ofswcd.org

18. If you have any questions, please email: Wendee Dodds: wzadanski@jeffersoncountyoh.com

What is your state/province?	**Pennsylvania**
What type of virtual Envirothon event did you host? (Check all that apply.)	- Challenge (participation-based only, no official 2020 winner selected for state/province)
Did your virtual event include an Oral Presentation component?	- No

Please provide a brief description of your event:
We held a 5-day challenge with each day focusing on one of the five main Envirothon topics. Participants competed individually rather than as a team. On each day, a 20-question quiz was open from 1 - 5PM.

What platform did you use for your online event?	Google docs
What was the cost of using this platform?	free

How easy was this platform to use?

Overall	Somewhat Easy
Interface	Somewhat Easy
Question Writing	Somewhat Easy
Multiple Choice Questions	Somewhat Easy
Short Answer Questions	Somewhat Easy
Test Scoring	Somewhat Easy
Oral Presentation	N/A
Oral Presentation Q&A	N/A
Distribution to Teams	Somewhat Easy
Submissions from Teams	Very Easy

What features did you like about this platform?
Most students had access to this platform. It was easy to use and scoring was done automatically. Results were easily exported to an Excel spreadsheet.

What were the drawbacks to this platform?
In order to do a timed test, an additional program is needed. We did not purchase it this year, but are researching it for future use.

Would you use this platform again? Why or why not?Yes, because of its simplicity.

If you hosted a competition or challenge, how did you monitor that the rules were being followed?
The students were on held to the honor system after they agreed to follow all of the rules. We have not found a way to fully monitor this.

Pennsylvania Envirothon Online Challenge Information

This year's Pennsylvania Envirothon Online Challenge was an individual event and not a team event, which is not a typical Envirothon contest. Students could complete all five challenges or as many as they chose to complete.

How did students take tests (zoom, google, etc.)?
We set up 5 station tests in Google Forms. Each test consisted of 20 multiple choice questions. Because ours was a week-long challenge, on each day, individual students received a link to that day's challenge. PA Envirothon coordinated this effort through each of the county Envirothon coordinators who then provided their Envirothon teachers/coaches with the information. The teachers/coaches were then responsible for providing the announcement (shown below) to their students.

We decided to do this for liability reasons. By working strictly through the teachers, who are permitted to have direct contact with their students, PA Envirothon and the County Envirothon Coordinators never had direct contact with the students.

Were the tests timed?
On each day, students were given a window from 1:00 – 5:00 PM to complete the quiz. Each quiz was stamped with the date and time. If the quiz was submitted outside of the given time frame, that student's score was not included in the results.

What about the Oral Presentations?
We did not hold oral presentations.

Did you have a virtual awards ceremony?
Because it was an individual event, we did not hold an awards ceremony. We shared a results media release at the end of the week-long challenge to recognize the Top 3 overall students who completed all five challenges.

Prizes for the top scorers were awarded for each day. The top 10 scores each received a $20 gift card. In the event that there were more than 20 top scorers for a given day, the board randomly selected 10 winners from the pool of top scorers. At the end of the week, the top overall scorers won Pennsylvania Envirothon apparel!

How did you police the rules?
Participants were encouraged to follow the fairness statement that they checked on the quiz. Please adhere to the honor system (no use of any resources while you take each Challenge)!

Announcement of Online Challenge – 04.17.2020

Envirothon Coordinators,

As promised, Pennsylvania Envirothon has developed online quizzes for each of the five Envirothon stations. Each quiz consists of 20 multiple-choice questions. Pennsylvania Envirothon will provide you with links to access each of the Google Forms' quizzes.

The quizzes can serve County Envirothon programs in a couple of ways.

A. As an "optional" County Envirothon Competition where students/teams will complete the quizzes, and the scores from students/teams representing your County will then be forwarded to you. This will provide you with a way to award students for their dedication to preparing for Envirothon. It is also a way for you to utilize your 2020 sponsorship funds, scholarship awards, and prizes.

Each county choosing this option will be asked to select a date (perhaps your original County Envirothon date) on which you will hold your "quasi" competition. You will then be provided with links to access each of the quizzes, which can only be accessed for a limited amount of time (for example from 1 – 5 p.m. on April 30).

For counties who want to use the quizzes as an <u>optional</u> "County Envirothon Competition," Envirothon Coordinators please follow the instructions below:

1. Determine on what date and time you would like to hold your County competition and notify me at the <u>PA Envirothon</u> with this information.
2. Contact your Envirothon teachers/coaches, sharing the details of the competition – date, time, awards, etc. Compile a list of participating schools/teams (including students' names) that will participate in the online competition.
3. PA Envirothon will share an announcement that you can then provide to your participating schools/teams. **Encourage participants to follow the fairness statement that they have checked on the quiz**.
4. The day after your county's students/teams have completed their quizzes, I will forward a spreadsheet containing the quiz scores to you, the Envirothon coordinator.

Instructions for the students/teams:

This quiz consists of 20 multiple-choice questions. To be successful with the Envirothon quizzes, it's important that you have studied the 2020 Envirothon resources. Keep the following in mind:

- **One Attempt** – You will have one attempt for this quiz with your score being recorded to your county's spreadsheet.
- **Timing** – You will need to complete each of your attempts in one sitting. Make sure you answer ALL of the questions before clicking the Submit button.
- To start, click the link to open each quiz. When finished, click the **"Submit"** button.
- **Answers** – You may review your choices and compare them to the correct answers after your final submission.

B. During the week of **May 18**, Pennsylvania Envirothon will hold a week-long "***Online Challenge***" so all students and teams can compete for Envirothon prizes. Students and teams will need to contact their County's Envirothon Coordinator in order to access the quizzes. An "Online Challenge" schedule for the week of May 18 – 22 is attached for your reference.

Online Challenge Guidelines Email message – 04.22.2020

Envirothon Coordinators,

We are excited to hear that many Envirothon students are still interested in "Taking a Natural Challenge" after our having to cancel this year's event. To help answer questions that you or teachers/students may have, below are some basic instructions to guide you through this process.

5. Contact your Envirothon teachers/coaches, sharing the details of the Online Challenge. To help you streamline who is planning to accept the Challenge, ask teachers to respond and provide his/her current email address as well as a list of Envirothon students who may participate. (Please limit students to those who would have competed in this year's senior high Envirothon contest.)

6. For your information, compile a list of participating schools/teams (including students' names) that will participate in the online competition.

7. Each day during the weeklong Challenge (May 18 – 22), Pennsylvania Envirothon will share an announcement that you then can email to your participating schools/teams. The announcement will include the link to that day's online Challenge as well as the following instructions for participants.

   Instructions for the students/teams:

   This Challenge consists of 20 multiple-choice questions. To be successful with the Envirothon quizzes, it's important that you have studied the 2020 Envirothon resources. Keep the following in mind:

   - ***One Attempt*** *– You will have one attempt for this quiz with your score being recorded upon submission of your quiz.*

   - ***Entry deadline*** *– You may start each day's Challenge at 1:00 PM and your entry must be submitted by 5:00 PM on that same day. Make sure you answer ALL the questions before clicking the "**Submit**" button.*

     Participants are encouraged to follow the fairness statement that they have checked on the quiz. Please adhere to the honor system (no use of any resources while you take each Challenge)!

   - ***Results*** *– Final submissions and results will be compiled by Pennsylvania Envirothon.*

8. Pennsylvania Envirothon will award prizes for the top scorers each day. The top 10 scores will each receive a $20 gift card. In the event there are more than 10 top scorers for a given day, Pennsylvania Envirothon will randomly select 10 winners from the pool of top scorers. At the end of the week, the top overall scorers will win Pennsylvania Envirothon apparel.

9. If your county would like to award prizes to students who would have participated in your County Envirothon competition, Pennsylvania Envirothon can email scoring information specific to your county, at your request.

Pennsylvania Envirothon Online Challenge

May 18, 2020

Day 1 – Dirty Monday - <u>Soils and Land Use Challenge</u>

Thank You
Partners and Sponsors

USDA United States Department of Agriculture
Natural Resources Conservation Service

pennsylvania DEPARTMENT OF AGRICULTURE

Pennsylvania SCC State Conservation Commission

Welcome to **Day 1** of the Pennsylvania Envirothon Online Challenge! Every day this week your knowledge will be tested on a specific Envirothon subject area.

Let's see what you've learned about Pennsylvania's "soil structure and land evaluation."

Instructions for the students/teams:

This Challenge consists of 20 multiple-choice questions. To be successful with the Envirothon quizzes, it's important that you have studied the 2020 Envirothon resources. Keep the following in mind:

- **One Attempt** – You will have one attempt for this quiz with your score being recorded upon submission of your quiz.

- **Entry deadline** – You may start each day's Challenge at 1:00 PM and your entry must be submitted by 5:00 PM on that same day. Make sure you answer ALL the questions before clicking the "**Submit**" button.

  Participants are encouraged to follow the fairness statement that they have checked on the quiz. Please adhere to the honor system (no use of any resources while you take each Challenge)!

- **Results** – Final submissions and results will be compiled by Pennsylvania Envirothon.

- **Awards** – Top scorers will be announced on the Pennsylvania Envirothon Facebook page. Prizes for the top scorers will be awarded for each day. The top 10 scores will each receive a $20 gift card. In the event that there are more than 10 top scorers for a given day, Pennsylvania Envirothon will randomly select 10 winners from the pool of top scorers. At the end of the week, the top overall scorers will win Pennsylvania Envirothon apparel!

What is your state/province?	**Rhode Island**
What type of virtual Envirothon event did you host? (Check all that apply.)	- Competition (an official winner for state/province was selected)
Did your virtual event include an Oral Presentation component?	- No

Please provide a brief description of your event:
We used the Zoom platform to train the teams and advisors. We set up a practice session to see if it would work then set up breakout rooms. Each team selected a captain and scribe. The capt had the final say on the test answers while the scribe was responible to fill in the answers. The reason for this was if the team had questions about the test the Capt. could leave the breakout room to ask the area supervisor and then return to the breakout room while the team continued to work on the test. Each of the four subject area supervisors created a Google form which was set up as a quiz.

What platform did you use for your online event?	Zoom and Google forms
What was the cost of using this platform?	We found a sponsor for the Zoom sessions and paid $50 per breakout room. Google forms was free.

How easy was this platform to use?

Overall	Very Easy
Interface	Very Easy
Question Writing	Very Easy
Multiple Choice Questions	Very Easy
Short Answer Questions	Very Easy
Test Scoring	Very Easy
Oral Presentation	N/A
Oral Presentation Q&A	N/A
Distribution to Teams	Very Easy
Submissions from Teams	Very Easy

What features did you like about this platform?
Allowed multiple participants at a time

What were the drawbacks to this platform?
Could be cost if we we had not found a sponsor

Would you use this platform again? Why or why not?
Yes easy to use and set up.

If you hosted a competition or challenge, how did you monitor that the rules were being followed?
As host I was able to visit any breakout room at any time plus the the breakout rooms were set to close at a predetermined time.

Other Comments (Including anything you think may be useful for other states/provinces using this platform or method)
We also held a virtual awards ceremony.

President's Comments for the 2020 Rhode Island Envirothon

This year has been different, that goes without saying. Many of us will recall the trials, tribulations and downright struggles we have been facing for the last 10 or so weeks as we respond to the coronavirus. If you listen to the news, things are changing and how we do our daily lives had to change too. This 2020 Rhode Island Envirothon was no different.

This year I was asked to fill in for some very big shoes as the interim President of the Rhode Island Envirothon (RIE). Many of you may have heard that Dave Westcott, the President of RIE, passed away after a valiant battle with cancer. Although I got to know Dave only recently, I know his leadership and unquestionable support for the RIE will be missed.

Dave brought to RIE such a superb knowledge of the environment, the workings of navigating all levels of government and a strong commitment to young, aspiring conservationists. Dave will be missed, and in his honor, the RIE Board has chosen to name the plaque of the winning team for RIE the Dave Westcott trophy, so we'll always have a remembrance of a friend and supporter of RIE and its mission and values.

No one wanted to cancel this year's competition. First, because we felt that we did not want to disappoint our high school teams and second, we like a challenge. As other states struggled with holding a 2020 competition, we think our size was a benefit (sometimes small is a good thing). What is so great about RIE is that no one is required to participate. And everyone, from students, to advisors, to the site supervisors, board members, supporters and sponsors, do all of this because they are committed to the ideas and ideals of the Envirothon.

So, we held the 2020 RIE, virtually – and a few minor hiccups, but it worked!

I want to thank all of you for keeping Envirothon going in such a difficult time. Talk about turning the entire operation upside down! You did a fantastic job!
Eric Zabel – Narragansett High School

Friday felt more rewarding than any in the last 12 weeks! The kids had a fun time and it pulled us all together. RI Envirothon is composed of rather outstanding folk!!!
Robyn Pothier – Coventry High School

After graduation from school, I learned that it was sometimes easier to plagiarize the good work of others than try to create something from scratch, particularly when someone else had done it so well.

I always like to give credit to those sources when I do this, so thanks to Peter Stetson, I offer the following comments:

The RIE 2020 was going to be different once we started to hear the news. We quickly saw that there was a need to do it differently and several learning experiences lead up to being able to hold our 2020 virtual competition.

First Peter Stetson participated in the Teachers Teaching Teachers GIS program sponsored by the ESRI company, and he was able to learn about the Zoom platform.

Seeing how that was used on monthly webinars by the ESRI staff, Peter suggested that we could use that platform to conduct our topic area training because educators were having trouble attending them; trying to get time out of school during weekdays and few students were attending our weekend sessions.

This year we also held our environmental issue training by Zoom. One of the features of Zoom is the ability to record your session which we did then posted the sessions on a Rhode Island Envirothon YouTube Channel. We also had each area supervisor record them in the field using the equipment they felt were important for the student to know [its uses and description]. We also added those to our YouTube Channel.

Once Peter's former high school (Coventry) became a 'Google school' we got access to several Google applications built into the Google for Education package. One of those was Google Forms, which Peter used in his classes to create online quizzes. Many quizzes were self-grading using that quiz feature in Forms.

So when it became apparent that we would not be able to hold a face-to-face competition based on the social distancing restrictions imposed by our state Peter suggested to the board that we could combine the Zoom platform and Google Forms to create an online competition. We first had to get all the schools and their advisors to buy into this type of competition. All of our schools were already using distance learning with their students but many of the educators were finding it very time consuming to have to create lessons for their students let alone work with an after school club or group to prepare for the Envirothon competition. We decided that we could not include an oral presentation due to time constraints and what the advisors and teams would need to do to prepare using their own distance learning.

Those that felt they could work it out were asked to select a team Captain and Scribe. The Captain was in-charge of the team while the Scribe recorded the answers on the Google Form. The Captain could leave the breakout room and enter the main room to ask questions of the specific area test creators while the scribe continued answering the test questions. The Captain could then return to their breakout room.

We held two practice sessions. During the first one, we worked with a couple of volunteer teams to work out any kinks (such as sending the Google form test to the Scribe rather than the Captain). We then offered an opportunity for all teams to run through a practice session so that all team members could experience what the competition day would be like. We then scheduled the competition day a couple of weeks ahead so that the students competing could clear their schedules to be able to be

present for the entire competition. Prior to the competition day, Peter collected the team scribe's email and created a group email so Peter could send one test out to a whole group with one email.

One of our partners, RI Resource Conservation and Development Council, allowed us to utilize their license for Zoom and helped to setup the team breakout rooms. The breakout rooms in Zoom allowed each team to be in a separate area to take each of the tests. We set up each breakout room to be open for 40 minutes during which time the team would take the specific subject test. At the end of 40 minutes [or before 40 minutes] the breakout room closed and all the team members returned to the main room. During the first test we found that there was a short delay in the scribes receiving their Google form so beginning with the second test we emailed the form to each scribe and got a verbal confirmation from them before assigning them to their team breakout rooms.

Our site supervisors for each of the four areas [Aquatics, Forestry, Soils, and Wildlife] worked together to learn how to create a quiz using Google Forms and shared it with me as the host on competition day. On the day of the competition, Peter set up the breakout rooms in Zoom, established a time limit for the room and a time that the rooms would close after the test, and assigned each student to their specific room.

All in all it worked as a test but we missed the hands-on applications.

Peter Stetson
Educational Mapping Services
"A country grows great when old men plant trees in whose shade they know they will never sit."

What is your state/province?	**Virginia**
What type of virtual Envirothon event did you host? (Check all that apply.)	- Challenge (participation-based only, no official 2020 winner selected for state/province)
Did your virtual event include an Oral Presentation component?	- No

Please provide a brief description of your event:
During the week of May 18- 22nd, Virginia 9th-12th graders could test their natural resources knowledge on Aquatics, Forestry, Soils, Wildlife, and Current Issue. These students did not have to be Envirothon Students. To participate they had to fill out a google form. On Monday, May 18th I emailed all of the students who signed up links to take the tests. They could choose to take one, two, three, four, or all of the tests. On the sign up form, I was able to ask them if they were part of an Envirothon Team, and why they decided to participate. I used this information to create a summary report, which is attached to this form.

Hearing from adults that also wanted to test their knowledge, we held an online natural resources testing week in June- 22-28. We had over 200 adults from across Virginia participate. I partnered with our different agencies and partners, including Dominion Energy and VA Dept of Environmental Quality (DEQ) to get their staff to participate and had over 50 DEQ staff participate. I am working on a summary of this event and will share it. The adults really liked the testing week. They took the same tests that the students too and could take any test or all of the tests they wanted to take.

Being that Virginia State employees couldn't access google docs, I used Survey Monkey to have people sign up to register for the adult testing week. There was a cost to use Survey Monkey and it would be helpful to know of another free data collecting platform to use.

What platform did you use for your online event?	ClassMarker
What was the cost of using this platform?	We got a discounted rate since we are a non-profit. There are three levels, free, which we first used to understand ClassMarker, than during the online testing week we used professional plan 2 to accommodate more people and use features like adding videos and pictures to the questions, this costs $39.95 a month. Here is a link to learn more https://www.classmarker.com/online-testing/price/education/

How easy was this platform to use?

Overall	Very Easy
Interface	Very Easy
Question Writing	Very Easy
Multiple Choice Questions	Very Easy
Short Answer Questions	Somewhat Difficult
Test Scoring	Very Easy
Oral Presentation	N/A
Oral Presentation Q&A	N/A
Distribution to Teams	Very Easy
Submissions from Teams	Very Easy

What features did you like about this platform?

I liked how I was able to put a time limit and time period for the test that a person had to take it in, how once a person had taken the test they received their score, and that I was able to use pictures for the questions.

With ClassMarker you set up the questions and answers at the same time, which is a lot of work, but once it is done, you can create tests using selected questions, and the answers are already provided.

Tests could be taken on a desktop or smartphone,

What were the drawbacks to this platform?

Writing a short answer question was hard because the answer had to be specific to grant points.
So, we didn't use this option but were able to use matching, and multiple choice.

Would you use this platform again? Why or why not?

Yes, ClassMarker was very easy to navigate and met the needs of the online testing week. I need to learn more about writing short answer questions but feel I will use ClassMaker as a resource and possible way to run our Envirothon Program should we need to run things virtually.

If you hosted a competition or challenge, how did you monitor that the rules were being followed?

Students were on an honor system not to look up answers online. There was no way to monitor this. Questions were written so a student couldn't just copy and paste them into google to find an answer.

Other Comments (Including anything you think may be useful for other states/provinces using this platform or method)

I would encourage people to check out Class Marker and I'm happy to share my links to the tests we used. It was very user friendly and not too costly.

Please do reach out if you have any questions about our program.