

## **Spruce Mountain High School Envirothon Team Competes in International Competition For Immediate Release - July 29, 2021**

The Spruce Mountain High School Envirothon Team competed in the 2021 National Conservation Foundation Envirothon which was hosted virtually by the National Conservation Foundation (NCF) and the Nebraska Natural Resource Districts. Nebraska was originally scheduled to host a live event for the 2020 competition, but the event was canceled due to the COVID 19 pandemic and it was rescheduled to July 25th - July 28th 2021 and held virtually using online platforms. Forty one championship winning teams from states across the US, and Canadian and Chinese provinces took part in the competition, which was down about 25% from past years in the number of teams, as some states and provinces did not hold competitions this year.

"We are so glad we were able to have competed in the Maine Envirothon back in May and in the NCF Envirothon this past week," said Advisor Rob Taylor. "We were so fortunate that the Maine Association of Conservation Districts was able to create a virtual event so that students in Maine could have access to Envirothon this year. They put on a great virtual Maine event. The NCF also was able to create a quality experience for students internationally. This was not easy to do at any level and these organizations really stepped up to support the Envirothon program."

The team from Spruce Mountain finished 34th out of 41 teams, taking 19th place in the Current Issue Test, 20th in Aquatics, 21st in Wildlife, 31st in Oral Presentation, and 40th in Forestry. The team, who call themselves the Spruce Mountain Lynx, consists of Senior Captain Drew Delaney, sophomores Owen Schwab and Dan Wilson, and freshmen Kasey Burns and Leah Burgess. Abraham Geissinger competed with the team at the Maine Envirothon, but was unable to compete in the NCF event due to a family trip. Dan Wilson was the team alternate at the Maine Envirothon and stepped up to fill in for Geissinger, who still attended most of the preparation events for the competition, along with members of other Spruce Mountain Envirothon teams as well. "This was a tremendous learning experience for students," said Taylor. "They are so young to be competing at this level. Many teams are senior laden at the NCF event. Drew provided great leadership throughout the year to his younger teammates. His sophomore year his team took second place in Maine, losing by just a few points to an all senior team from Spruce Mountain. He was excited about the competition last year, but disappointed when it was canceled. I am so glad he got to compete this year," Taylor added.

The team had a number of hurdles to overcome and made great progress as the NCF event went along. First of all, there were numerous technology challenges to overcome with the event being virtual. SMHS Science teacher Sikwani Dana volunteered to proctor the students during the five one hour tests on Forestry, Soils, Aquatics, Wildlife, and the Current Issue taken on Monday July 26th, as the team needed a non advisor proctor. A testing platform called Inspira was used and the students were monitored by their computer as they were tested. A glitch in the team's computer appeared prior to the first test and technology support specialist Mark Bonneive quickly configured a second machine to get the team testing. During presentations, the team wore wireless microphones using a sound system set up by music teacher Dan Labonte, and English Teacher Kym Bryant provided a wide angle camera was provided by English Teacher Kym Bryant.

As for the next challenge, the students had to take what they had learned about Maine's natural environment and apply it to learning about Nebraska's ecosystems. This was a great deal to learn and the team met with advisors Rob Taylor and Biology teacher Ken Baker every week since winning the Maine Envirothon in May to prepare for the competition, as well as studying on their own. "Ken has been a great asset to our team. We are so lucky to have him on board working with the kids," said Taylor. Also, Maine did not hold a Current Issue presentation as part of the Maine Envirothon, as the logistics were a challenge, both for judging the event remotely and for teams preparing the presentations with all of the COVID restrictions in schools. "It was the right decision for Maine to not do CI presentations this year, but it created an interesting situation for the kids at the NCF event," said Taylor. "Only Drew had ever done a current issue presentation and that was a 6 minute presentation his sophomore year in Maine. The NCF CI presentation needed to be 20 minutes long with a 10 minute question and answer period to follow. Most of the kids had done LEGO League in Middle School and had some public speaking experience from that program. They learned a great deal about public speaking."

The students were also challenged with a problem to solve that involved fixing the problem of nitrate contamination and unsustainable water use in the Ogallala aquifer, which is beneath nine midwestern states and is the source of Nebraska's water for irrigation and drinking water. The team's solution included using new technology to manage nutrient monitoring and applications, preserving playa wetlands that help recharge the Ogallala aquifer, and implementing agroecology techniques to reduce the need for fertilizers and improve water infiltration. Taylor said, "I told the students a number of times during the week that a person could do a PhD dissertation on solving problems like those in the Ogallala. The kids were given the problem on July 16th and could work on it until presentations on July 27th. They could do research online to help solve the problem. Normally they would be given the problem on "Sequestration Day" at the live competition and would need to solve it in one day with just what they already know. Being able to do research actually made the problem more intense and it took a lot more time. The kids spent close to 20 hours as a team analyzing the scenario, developing their solutions, developing a presentation and slide show and rehearsing."

After the competition, the students had a chance to reflect on all they had done. Freshman Leah Burgess said, "When I first heard I had to learn all about Nebraska's wildlife and environmental issues in two months, I thought it would be impossible. It was actually very enjoyable. Working with my teammates and Mr. Taylor and Mr. Baker to strengthen our ideas, demonstrate how teams work together, and have some fun was an experience to remember." Fellow freshman Kasey Burns added, "I learned not only about the sections of Envirothon, but teamwork and perseverance as well. My favorite part was the oral presentation because it pushed me outside of my comfort zone." Sophomore Dan Wilson said, "I didn't learn as much as I thought I did, but I learned way more than I already knew" and fellow sophomore Owen Schwab added, "Envirothon has a strange and rather unique way of being fun because of how hard it is. You don't need to be successful to enjoy it because you do it for the challenge, not the chance of winning." Senior Drew Delaney summed it up when he said, "My favorite part was to be able to compete at the international level because it was an entirely different experience than a state level competition and requires a contribution of every team member."

### Photo Captions:

Team Testing - Spruce Mountain Envirothon Students work on one of five one hour tests on Forestry, Wildlife, Soils, Aquatics, and Current Issue taken on Monday July 26th. Students pictured left to right are Dan Wilson, Kasey Burns, Drew Delaney, Leah Burgess, and Owen Schwab.

Team Celebration - Spruce Mountain Envirothon Students celebrate after the completion of five straight days of Envirothon Competition. Left to right are Dan Wilson, Owen Schwab, Advisor Rob Taylor, Kasey Burns, Leah Burgess, and Drew Delaney.

### Team Testing





Team Celebration

