

# How is Roundup Affecting the Agricultural Community?



## Meridian FFA Chapter

**State Qualifying Date: April 6, 2021**



**Meridian High School**  
**1900 West Pine Avenue**  
**Meridian, Idaho 83646**  
**208-350-4160**

**Amy Heikkila**  
**Audrey Ziegenfuss**  
**Tomie Moody-St. Clair**  
**Mason Hall**

**Lucas Rosenbaum**  
**Saydee Henning**  
**Dillon Lane**

# ISSUE SUMMARY

## **Why is this issue important to Idaho?**

The issue of Roundup usage facing American Agriculture has a huge direct affect on Idaho. Here in Idaho we have phosphorus mines that produce the majority of the phosphorus that is used in Roundup and many other products. Due to this, the use of Roundup and the lawsuits on Bayer associated with Roundup have a direct affect on Idaho's economy due to the mining of phosphorus in mines South East Idaho near Soda Springs. Roundup currently accumulates over 2 billion dollars into Idaho's economy in downstream sales every year. In addition, the soil and environmental affect of Glyphosate based products has seen to be slightly different in every state and ultimately, every area it comes in contact with. In spite of this, the use of Roundup affects Idaho's soils and economy due to the tremendous production and use of it here in Idaho.

## **What are the benefits?**

Advocates for Roundup claim it:

- Provides increased and improved yield means larger profit for farmers
- Effective weed control
- Sterile seeds prevent crossbreeding with weeds
- Has been scientifically proven not harmful and not to cause non-hodgkin's lymphoma
- Increased safety
- Binds tightly to soil and won't run off into water

## **What are the risks?**

Critics of the use of the herbicide Roundup claim the risks are:

- Leads to Non-Hodgkin's Lymphoma
- Non-selective herbicide
- Contaminates the environment and animals
- Creates weed resistance
- Seeds from Roundup ready crops are selective
- Science and safety facts are not fully known

## **What is the historical background of this issue and what caused it?**

Roundup was developed in the 1970's to expel weed growth in designated areas of use. Since its widespread usage, cases of cancer and other health concerns have arisen. The only evidence leads back to glyphosate which by some organizations is labeled as a carcinogen.

- 1972 — Roundup was developed by Monsanto.
- 1974 — Roundup began to be used in Malaysia and the UK.
- 1976 — Roundup was seen and documented as a safe solution to weed control.
- 1985 — EPA considered glyphosate a carcinogen (Pulse, 2017).
- 1996 — First Roundup Ready crop is used.
- 2014 — First documented case of Non-Hodgkin's Lymphoma.
- 2016 — Bayer purchased Monsanto (Roundup, 2020).
- 2018 — Monsanto/Bayer lost trial of \$78 million due to cancer (Pulse, 2020)

# ISSUE SUMMARY

## List the Course(s) in which instruction occurred:

- Intro to Plant Science (169 students) - introduces students to the plant industry by looking into how pesticides affect plants and the environment.
- Botany/ Plant Soil Science (249 Students) - begins to look deeper into the plants of Idaho, both native and noxious and how the environment affects their growth.
- Horticulture I & II (51 Students) - provides hands on experience with growing and maintaining crops while limiting exposure to weeds and evaluating pesticides used when doing so.
- Landscape Design (13 Students) - evaluates the landscaping industry and analyzes which pesticides should best be used in selected areas.
- Natural Resources (16 Students) - explores the environmental effects of pesticides through evaluating how pesticides can contaminate water in runoff causing potential soil issues.

## What is the nature of this issue and why is this issue important now?

The active ingredient in roundup, glyphosate, has been known to cause adverse effects to the society. Its usage has supposedly been traced back to health problems such as cancer. A type of genetically modified organism or GMO has come from roundup. A roundup ready crop is immune to roundup so the weeds are taken out instead of the crop. These methods and uses of the chemical have proven themselves to be very effective. In the world, there has been 9.4 million tons used on fields. In America alone there has been 1.8 million tons sprayed. Although Roundup has had success, it's had some recoil. The World Health Organization claimed it was "probably carcinogenic to humans." Although, the environmental protection agency claimed it was not likely carcinogenic. About 43,000 court cases have been filed against Monsanto/Bayer concerning cancer. The problems continue to arise with little evidence or research to back the cases (Malkan, 2020).

## Who is involved in this issue?

**Bayer:** the company that produces Roundup and is under attack for the effects it has on people and the environment. **Farmers:** the main people who use Roundup on their crops and use it in large quantities. Have not seen negative effects from it. **Citizens (residential use):** worried about contracting cancer from the use of roundup. **Parents:** worried about the effects it will have on their children's body through contaminates from the use of Roundup on food. **Landscapers:** used as a herbicide in residential areas. Some are concerned about the effects it will have on them.

## How can this issue be defined?

Our forum falls under the area of "Environmental Issues" as listed in the focusing on Agricultural Issues instructional materials. The issue is defined as, "How is Roundup Affecting the Agricultural Community?" The issue of Roundup has been an under a series of environmental stewardship and has recently changed into looking at human safety due to the numerous court cases being presented. As more cases are being presented, Bayer Corporation has worked to solve the issue and how it is affecting the agricultural community as well as residentially by citizens, landscapers, scientists, farmers and Bayer Corporations.



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# LOCAL FORUM PRESENTATIONS

| WHEN              | WHERE        | TO WHOM                               | # PRESENT |
|-------------------|--------------|---------------------------------------|-----------|
| February 6, 2020  | Meridian, ID | Ronda Hirnyck                         | 3         |
| February 27, 2020 | Meridian, ID | Meridian Lions Club                   | 24        |
| March 10, 2020    | Meridian, ID | Ada County Farm Bureau                | 16        |
| March 11, 2020    | Boise, ID    | Senator Mike Crapo's office           | 3         |
| March 12, 2020    | Boise, ID    | Idaho State Department of Agriculture | 4         |

## Ronda Hirnyck

Meridian High School, Meridian

Date: February 6, 2020 Time: 4:00pm

Attendance: 3

February 6, 2020

Mr. Alan Heikkila  
Meridian Agricultural Science & Technology  
Meridian Professional Technical Center  
1900 West Pine  
Meridian, ID 83642

Dear Mr. Heikkila,  
This letter is to support the portfolio for the Meridian FFA Ag Issues Team. I understand the team is in the final preparation for their upcoming state competition. I met with you and the Meridian High School FFA team, after I was invited to review the presentation they were preparing for the state Ag Issues competition. The team has selected the topic of glyphosate herbicide. This is an extremely difficult topic to present the "issues" on. Glyphosate has been widely discussed, following some very prominent court cases with the claims that glyphosate had caused Non-Hodgkin Lymphoma (NHL), a type of cancer. The general public has been widely mis-informed by news media and social media, resulting in an extremely controversial set of issues revolving around the use of glyphosate, exposures from food consumed, and claims that is a carcinogen.

The Meridian FFA students have done an outstanding job researching the facts and non-facts around this herbicide (pesticide). They were well prepared to present the various concerns of glyphosate use, including the very pragmatic scientific opinions as well as the emotional, consumer concerns. I listened to their prepared presentation, representing all sides of the glyphosate debate, and was impressed with their depth of knowledge and understanding of the subject. They considered the risks and benefits of using this popular herbicide and the impacts those risks/benefits have on our agricultural and horticultural industries. This knowledge required understanding pesticide toxicity studies, glyphosate usage around the country, and the wide breadth of popular press information. Additionally, they considered how people from different backgrounds view risks and the use of pesticides in our food and landscape production. While visiting the team's practice session, I passed along additional science-based reference material to add to their study material.

I was very impressed with their depth of understanding of the glyphosate issues and their enthusiasm for the topic. I have worked in the pesticide field for 40 years, as a graduate student assistant, pesticide manufacturer representative, state pesticide regulatory official, and currently as the University of Idaho pesticide specialist. I was thrilled to find this group of high school students interested in the usage and impacts of a very important pesticide (herbicide) that is so widely used in the U.S. and worldwide!

I believe the Meridian High School FFA Ag Issues team is well prepared for their state competition. I had very little to add to their presentation and work on this topic. I appreciate the opportunity to support you and your students work. Good Luck!

Sincerely,

*Ronda E. Hirnyck*

Ronda E. Hirnyck, Extension Professor  
Pesticide Program Coordinator  
University of Idaho



Ronda is the University of Idaho Extension Pesticide Program Coordinator and has done extensive research on the use of Roundup.

# Meridian Lions Club



Visiting Lions Always Welcome

PO Box 266

Meridian, ID 83642

February 27, 2020

Mr. Alan Heikkila, Agriculture Instructor  
Miss Jessica Higer, Agricultural Instructor  
Meridian High School  
1900 W. Pine Avenue  
Meridian, ID 83642

RE: The FFA Agricultural Issues Event – Roundup (Glyphosate)

On behalf of the members of the Meridian Lions we thank you and your agriculture students/FFA members for the presentation to our Lions Club. Everyone did a commendable job. We encourage everyone to slow down their rate of speaking. And additionally, enunciate clearly and speak loud enough so everyone can hear.

We commend and thank you and your students for their participation in this important discussion. We wish the team well in the state competition. We believe with a little more practice and polish they will do well in the state event.

Sincerely,

John Mundt, Program Chair  
Meridian Lions Club

Hampton Inn and Suites, Meridian

Date: February 27, 2020 Time: 7:00am

The Meridian Lions Club is a community service group who has heavy ties working within the agricultural industry from growing up on farms or hosting ag-related events around the Treasure Valley.



## Ada County Farm Bureau

Ada County Farm Bureau, Meridian

Date: March 10, 2020 Time: 7:00pm

Attendance: 16



**Ada County Farm Bureau**

30 S. W. 8th Avenue • P.O. Box 210 • Meridian, Idaho • 83680-0210 • Phone: (208) 888-1821 • Fax: (208) 888-3769

To: Meridian FFA Ag Issues Team, Mr. Alan Heikkila & Miss Jessica Higer

From: Ada County Farm Bureau Board of Directors

On March 10th, 2020 during the monthly Ada County Farm Bureau Board meeting, the Meridian FFA Ag Issues team presented a mock dialogue session regarding Roundup and glyphosate to the directors of the board.

The board commends this team on their effort to study glyphosate and how it pertains to and impacts the many different stakeholders, including consumers. The presentation style was educational, engaging, and entertaining.

As Directors of the Ada County Farm Bureau, we applaud Mr. Heikkila, Miss Higer and the Team for their efforts and wish you all the best of luck in your upcoming competitions.

The Ada County Farm Bureau is made up of agricultural industry leaders who are concerned with educating the general public about issues facing agriculture.







# Senator Mike Crapo's office

Senator Mike Crapo's office, Boise

Date: March 11, 2020 Time: 3:30pm

Attendance: 3

March 25, 2020

Alan Heikkila, Instructor  
Meridian Agricultural Science & Technology  
Meridian Professional/Technical Center  
1900 West Pine  
Meridian, ID 83642

Re: Feedback for Meridian FFA Ag Issues Team

Dear Mr. Heikkila,

The Meridian FFA Ag Issues Team presented to me at Senator Crapo's state office in Boise on March 11, 2020. Joining me were Bob Sonnichsen, State Director of Business and Economic Development for Senator Crapo, and Brad Griff, Executive Director of the Idaho Sugarbeet Growers Association. The subject of the presentation was glyphosate and the debate over risks to human health.

Once again, the team was highly prepared and captured the ongoing debate of whether glyphosate is likely or not to be a human carcinogen following a determination made by the World Health Organization a few years ago. From concerned parents to farmers that rely on glyphosate in their operations, the differing perspectives on the issue were nicely summarized and presented. I especially enjoyed the focus on the multi-billion dollar class action lawsuits that are ongoing—many Americans have seen those ads on television and I think it resonates with any audience the team will be in front of. At the same time, the use of data from U.S. regulatory agencies, such as the EPA, stating glyphosate is safe and not likely to be a carcinogen is also highly effective. The environmental benefits of using glyphosate in modern farming practices compared to older methods was also nicely demonstrated.

A recommendation I would share with the group is to work on timing. The presentation felt a bit rushed, so with a little more practice and preparation, I think the team will be able to execute more clearly and without having to speak so fast. Another recommendation is to prepare for potential questions outside of farming and home use of glyphosate, such as the battle against noxious weeds and the use for vegetation management in the creation of firebreaks protecting public lands from devastating wildfires.

Thanks,

Casey

Casey N. Attberry  
State Director of Agriculture  
Senator Mike Crapo (R-Idaho)  
251 E. Front Street, Ste. 205  
Boise, ID 83702  
(208) 331-1776

The State Director of Agricultural Issues for Mike Crapo and his team of associates. The issues facing Roundup and Roundup Ready Crops have heavily affected the state and their team has been heavily involved in finding a solution to this issue.



# Idaho State Department of Ag

Idaho State Department of Ag, Boise

Date: March 12, 2020 Time: 3:30pm

Attendance: 4



Idaho State Department of Agriculture  
P.O. Box 7249 • Boise, Idaho 83707  
P: 208.332.8500 • F: 208.334.2170  
www.agri.idaho.gov

BRAD LITTLE, GOVERNOR  
CELIA GOULD, DIRECTOR



March 12, 2020

Alan Heikkila  
Meridian FFA Adviser  
1900 W. Pine Ave.  
Meridian, ID 83642

Dear Mr. Heikkila,

Thank you for the opportunity to host and observe the Meridian FFA Chapter's Ag Issues team at the Idaho State Department of Agriculture's office on March 12, 2020. The team did an excellent job discussing a challenging topic, and we always love a chance to meet with FFA students.

The topic your team has selected, glyphosate, is particularly important to Idaho agriculture. Your team has done excellent work in researching and representing the diverse and sector-specific dynamics of the issue.

We appreciated the opportunity to give your team feedback about communicating to different groups about a sensitive topic. It is especially important to remember the science-based answers to complicated questions while also respecting varied personal perspectives.

Thank you again for allowing us to hear from the team. Please do not hesitate to reach out to us for technical information or additional help in the future.

Sincerely,

*Chanel Tewalt*

Chanel Tewalt  
Chief Operating Officer/Communications Director

The Idaho State Department of Agriculture have been heavily involved in researching the effects that Roundup has had on areas across the State of Idaho.

