Welcome to the *Virtual* Hudson Data Jam!

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In this session, we will cover...

- **What is Data Jam?**
- **Why should we explore data?**
- **How to start jamming!**

What is a Data Jam?

Data Jamming: Creatively Sharing Science Stories of the Hudson Valley

Open to middle & high school students...plus a Family Data Jam!

History of Data Jam

- **Desert DJ** - Jornada Basin LTER (2012)

- **Baltimore DJ** - Baltimore Ecosystem Study LTER (2014)

- **Hudson DJ** – Cary Institute of Ecosystem Studies (2014)

- **Luquillo DJ** – Luquillo LTER DJ (2015)

- **Cedar Creek LTER DJ** (2017)

- **Northeast Shelf LTER DJ** (2019)

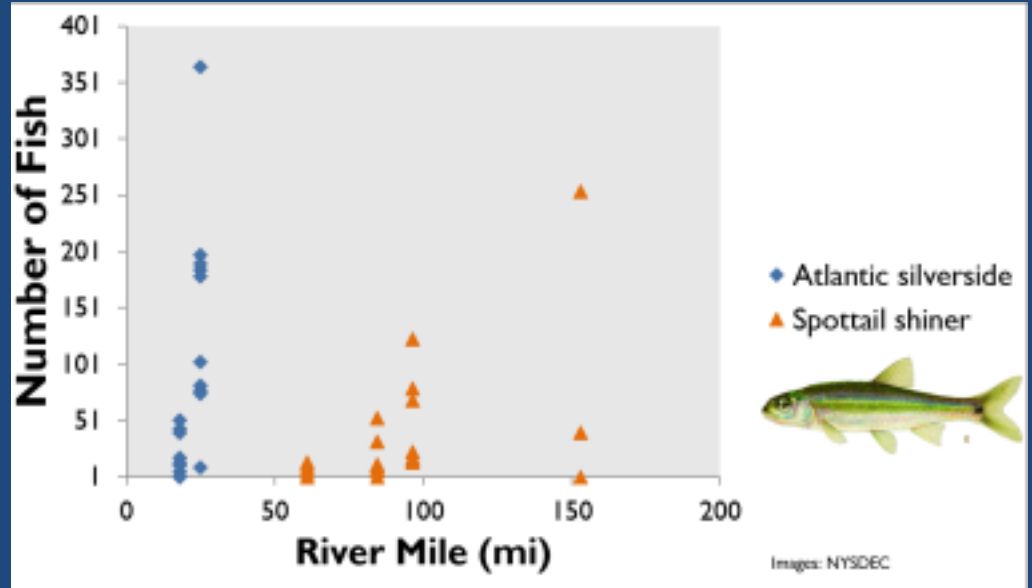- Data Literacy project through **Rutgers** for polar literacy (2019)

Contest Essentials

1. Download data:

DATA

Lyme Disease Prevalence in the Northeast

2. Graph & Report:

Atlantic silverside
Spottail shiner

Images: NYSDEC
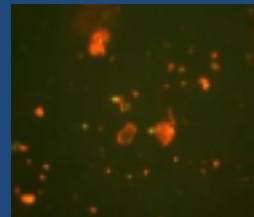
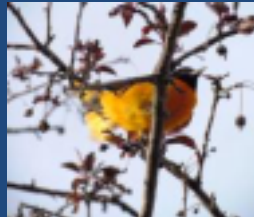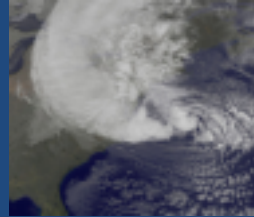# Contest Essentials

3. Communicate

4. Compete & Share
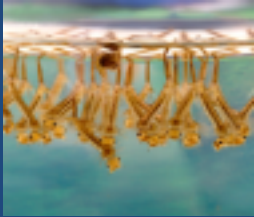

*It's all about getting kids EXCITED about **uncovering mysteries** + **increasing understanding** of the Hudson Valley ecosystem, **empowering** them to use data, & **sharing** what they discover with others!*

Check out our creative webinars March 2 & 4!
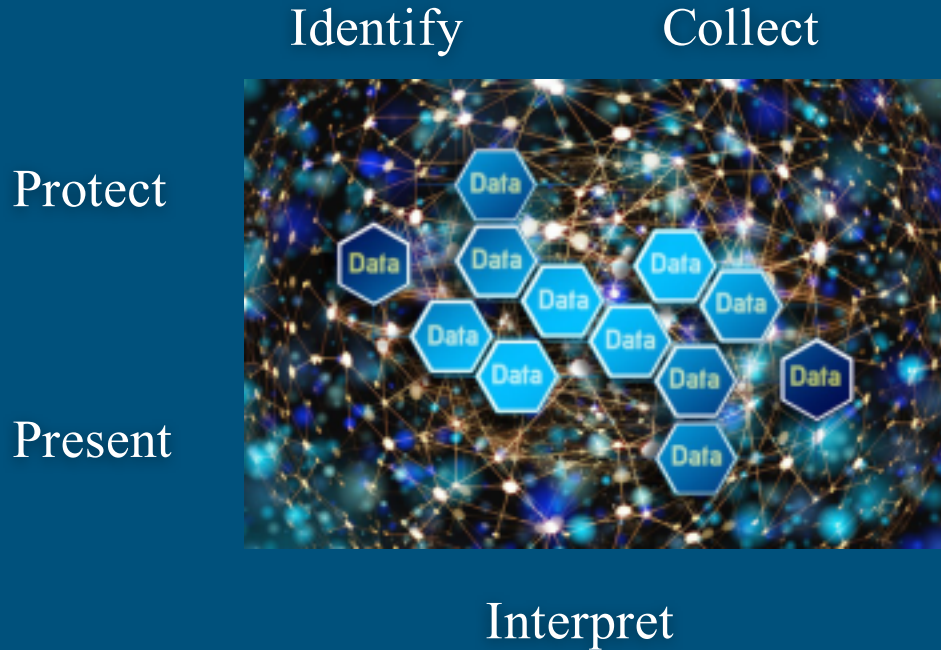
What kinds of data do we provide?
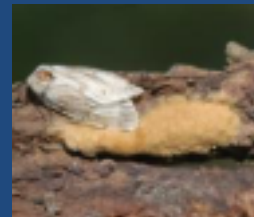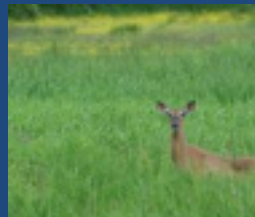
Data Literacy

Data Literacy JamBoard

What is Data Literacy?

1. Share your ideas

2. Add to the ideas of others

What is "Data Literacy?"

Identify   Collect

Protect

Present

Interpret

Habits of Mind
- Belief and Capability
- Resiliency
- Humility
- Ethical
- Flexibility
- Inventiveness
- Curiosity
- Critical Thinking

Next Generation Science Standards – Science Practices

BOX 3-1

PRACTICES FOR K-12 SCIENCE CLASSROOMS

1. Asking questions (for science) and defining problems (for engineering)

2. Developing and using models

3. Planning and carrying out investigations

4. Analyzing and interpreting data

5. Using mathematics and computational thinking

6. Constructing explanations (for science) and designing solutions (for engineering)

7. Engaging in argument from evidence

8. Obtaining, evaluating, and communicating information

Data Literacy Skills

Data Jam

How does the Data Jam address Data Literacy?

Access and use Big Data

- Where can I find data sets?

- How can I use this data set to understand something?

- What question(s) can I answer?

Data Jam

How does the Data Jam address Data Literacy?

Organize, summarize & synthesize data

- How can I filter the data set to answer a scientific question?
- Will my results be relevant and reliable?
- Did I choose the right descriptive statistics?
- Did I create an appropriate representation?

Data Jam

How does the Data Jam address Data Literacy?

Evaluate and critique an argument using data & reasoning

- What are the strengths & limitations of the data summary and/or representation?

- How can it be improved?

Data Jam

How does the Data Jam address Data Literacy?

Deal with variability

- How to limit it when carrying out investigations

- How to interpret and explain it

- How to use it to qualify confidence in claims

- How to understand where the variability comes from - is it natural variation in nature? Chance occurrences in research? Human error?
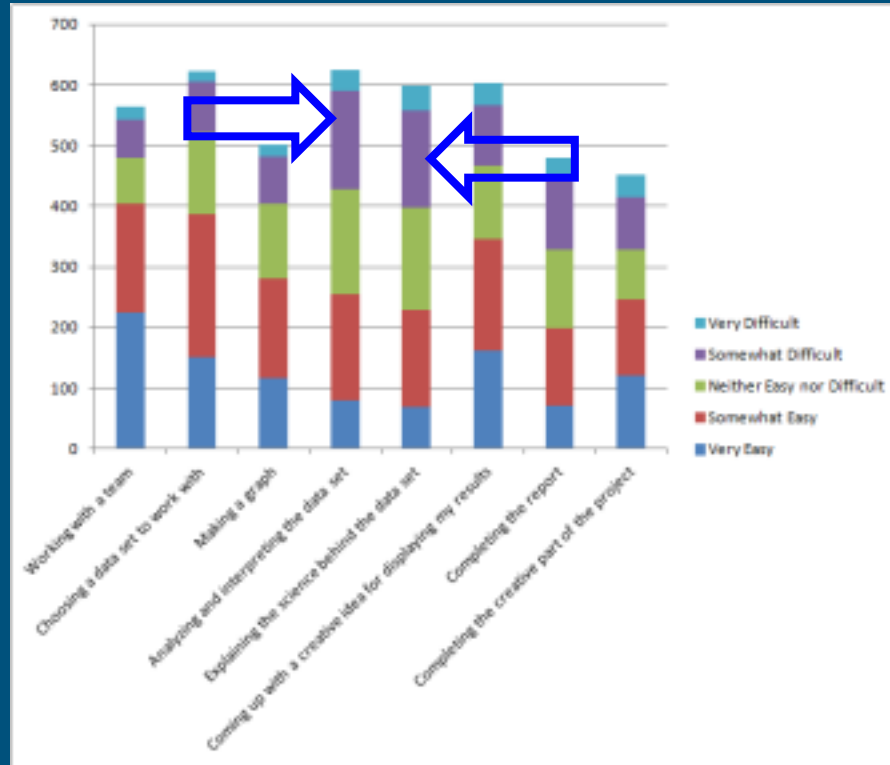
Students' Reasons for Participating

Average Score: 1- most important, 7 - least important
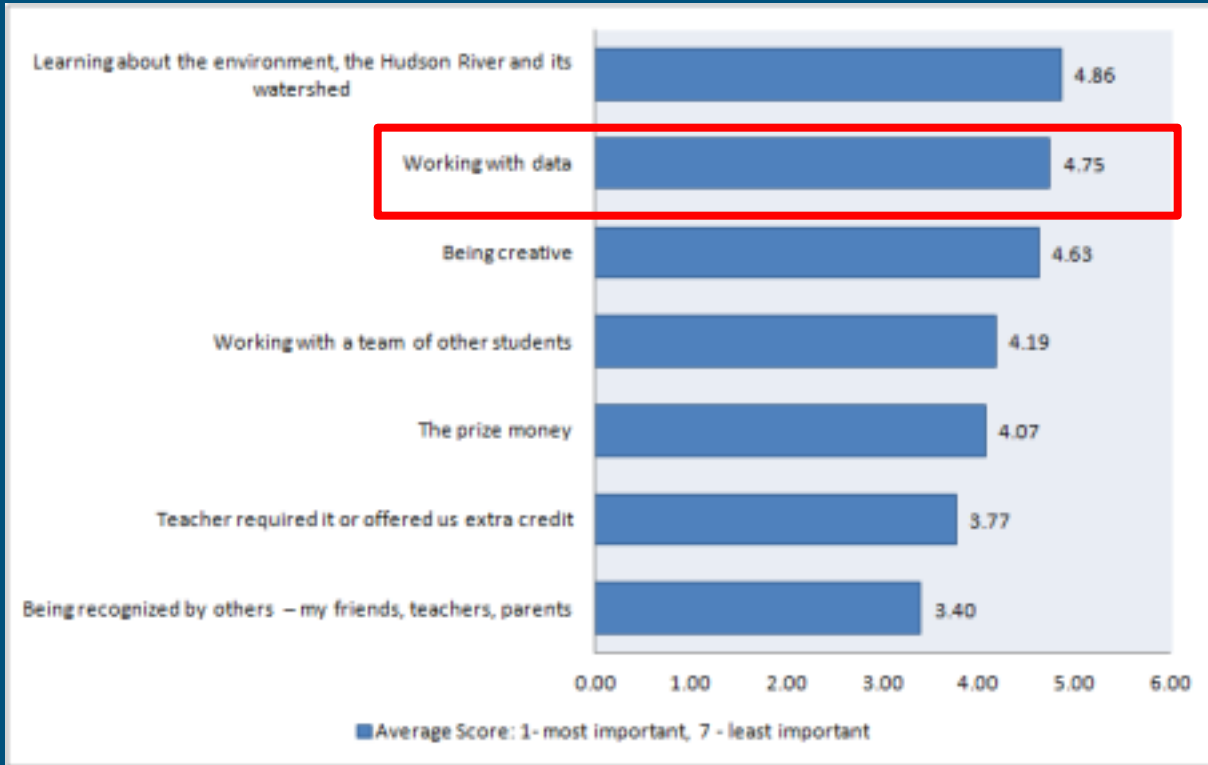
Student Confidence in Working with Data
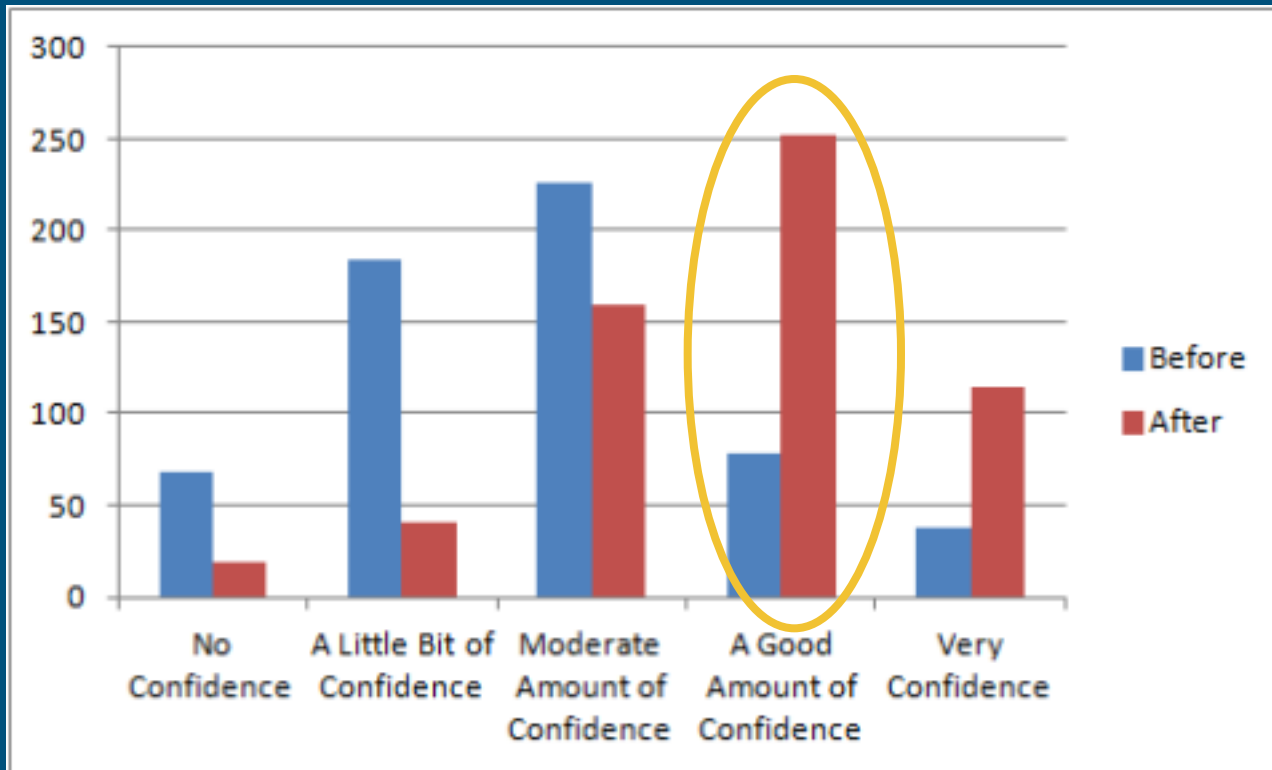
How Easy/Difficult was Each Part of the Data Jam?

Cary Website Tour

1. caryinstitute.org
2. Top tab: *Eco-Inquiry*
3. *Data Jam Competition*

Hudson Data Jam Competition

Now in its 8th year, the Hudson Data Jam Competition challenges students to creatively tell the science stories of the Hudson River watershed.

Making data "sing" through creative expression.

REGISTER   FAMILY DATA JAM   WEBINARS

Thank You! Any Questions?

2021 Deadlines

April 16 – Competition registrations and parent/guardian consent forms due.

April 30– Project submissions due online by 11:59pm EST.

May 21 – Virtual Data Jam Expo and Awards Ceremony. All prizes awarded during the event.

Webinars

February 18- **How to Engage & Support Students**

February 23 - Diving into Data: Part I

February 25 - Diving into Data: Part II

March 2 - How to Tell a Science Story with Art

March 4 - How to Tell a Science Story with Infographics

March 9 - Advanced Graphing & Data Interpretation

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