

# INCORPORATING THE HEMLOCK WOOLLY ADELGID

INTO HIGH SCHOOL ECOLOGY AND FIELD  
BOTANY CURRICULUM

ALANA ARCHANGELO

# THE CHALLENGES

- HOW TO INCORPORATE NEW “CITIZEN SCIENCE” LONG TERM PROJECT INTO TWO ESTABLISHED CURRICULA SPANNING TWO SEMESTERS OF (MOSTLY)DIFFERENT STUDENTS
- HOW TO GET STUDENTS ENGAGED IN PROJECT

# CONCERNS

- ANOTHER ENVIRONMENTAL SCIENCE TEACHER BEGAN THE PROJECT THE YEAR BEFORE...
  - IS SHE USING THE SAME TREES I WOULD?
  - *She was not continuing the project this year*
  - WOULD I BE EXPECTED TO OR BE ABLE TO CONTINUE THE PROJECT TO THE SAME EXTENT SHE HAD?
  - *Had to make the project match my strengths and not try to emulate someone who had different strengths*
  - CAN I FIND THE TREES SHE USED?
  - *There are two different plots marked on the campus. I was able to find most of the trees on one plot so that is the one I used*

# WHAT I DID SEMESTER ONE- GLOBAL ECOLOGY

- Students had to sample and analyze different Abiotic and Biotic components of three different sites: A field, deciduous edge, and hemlock forest. **This was already a part of the curriculum.**
- Students researched the value of hemlocks in our ecosystem.
- Viewed a power point on the HWA and why we should care about it
- Read Pest Alert article and answered questions about HWA infestation
- Visited one hemlock site and recorded crown health and seasonal growth

# ASSESSMENT

## FORMATIVE:

STUDENTS COMPLETED FIELD DATA CHARTS

STUDENTS ANSWERED QUESTIONS ON THE  
ARTICLES GIVEN ON HWA

## SUMMATIVE:

### QUIZZES-

TYPES OF SCIENTIFIC INVESTIGATION

HOW TO IDENTIFY A HEMLOCK

LIFE CYCLE OF HWA

# WHAT I WILL DO IN FIELD BOTANY

- ◉ REVIEW CHARACTERISTICS OF HEMLOCKS This is already a part of the curriculum
- ◉ GIVE STUDENTS A PRETEST ON HWA
- ◉ VALUE OF HEMLOCK FORESTS
- ◉ VIEW HWA POWERPOINTS
- ◉ CHECK SAME TREES AS WE CHECKED FIRST SEMESTER FOR PRESENCE OF EGG SACS
- ◉ READ ARTICLES ON HWA
- ◉ GIVE POST TEST ON HWA