

# Citizen Science at Comstock STEM Academy:

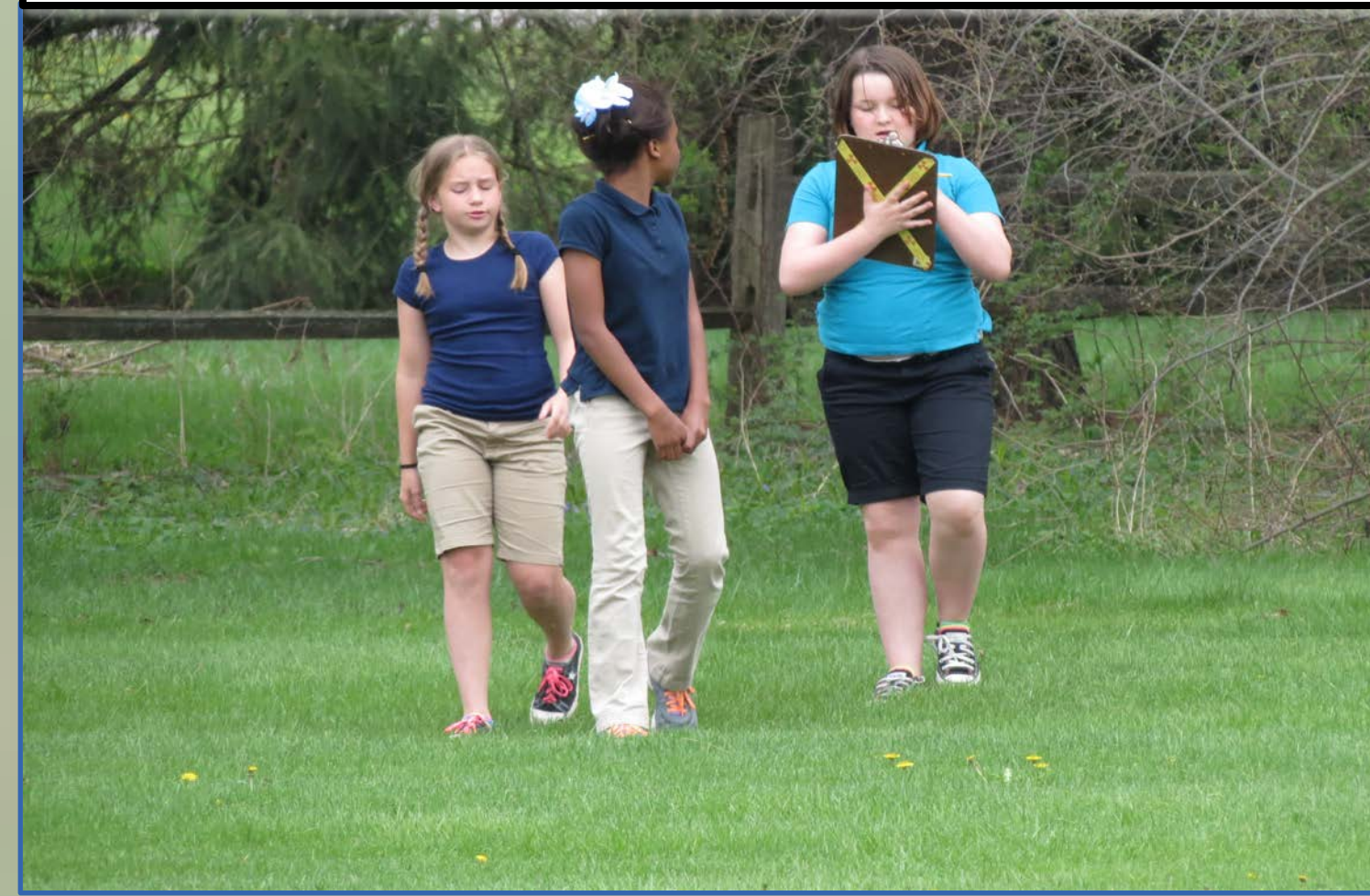
## Participating in NestWatch with Kellogg Biological Station's GK-12 Program

### Using Nest Boxes to Study Birds

#### 1) Install Nest Boxes



#### 2) Look for Nest Building and Courtship



#### 3) Classify Species by Nest Building Materials and Observations



#### 4) Monitor Progress and Record Data



#### 5) Draw Conclusions Based Upon Observations



### Research Questions

**Main Question:** How often do bird nest attempts fail? (Nest attempt = a clutch of eggs attains fledging)

- 1) What are the most common causes of nest attempt failures?
  - 2) Is there a relationship between nest location and failure rate?
  - 3) Is there a relationship between species and failure rate?
- Note: Success = at least one chick fledges per nesting cycle.

### Protocol for Monitoring Nests

1. Find a nest.
2. Remember where the nest is located (use Data Sheet)
3. Create a new NestWatch nest site (online: NestWatch.org)
4. Check the nest every 3-4 days
5. Add a Nest Attempt as soon as you have evidence of eggs or offspring.
6. Establish a species-specific visit schedule to avoid incubation and to "hit" the fledge date
7. Visit the nest one more time after you are sure it is empty.
8. Record your observations (each nest visit on Date Sheet)
9. Enter nest summary information (end a nesting attempt).
10. Estimate or Record Direct Observations of: First Egg Date, Hatch Date, Fledge Date
11. Add an Attempt if the bird pair lays another clutch of eggs
12. Repeat from step 6

- Chickadees Build Nests with moss in cavities or on ledges/shelves.
- Average Clutch Size: 6-8
- Incubation Period: 13 days
- Time to Fledge: 25 days

**Students established a visit schedule based upon a species' Nest Cycle Timeline**

### Nest Cycle Timeline

#### Lay the Clutch



#### Live Naked Young



#### Downy Feathers



#### Flight Feathers



### NestWatch Code of Conduct

1. Learn about the nesting cycle of birds
  - Read the NestWatch Manual
2. Plan and prepare for nest visits
3. Choose appropriate times to visit nests
4. Search carefully
5. Approach nests with care
6. Minimize disturbance at the nest
7. Do not handle birds or eggs
8. Don't leave a dead-end trail.
9. Respect private land.
10. Understand the Migratory Bird Treaty Act
11. **Get Certified** to Monitor Nests
12. Create your NestWatch Account

### Preliminary Results

