

Name: _____

Date: _____

Teacher Sheet: Clark's Nutcracker and Whitebark Pine Forests ✓Fledglings

Reflect on the Clark's Nutcracker and Whitebark Pine Forest Lesson and activity and answer the following questions.

1. If each food token (poker chip) represents 50 seeds how many seeds did you collect?

I was able to collect 25 poker chips, which equals 1250 seeds.

2. Was your group able to collect enough seeds to survive the winter (1,000 or more seeds for one; 2000 or more seeds to both survive)? *No.*

3. What were the greatest challenges in caching the pine seeds?

The greatest challenge was that some of my classmates chased me away from a food source and I was not able to collect seeds that round. The white blister rust outbreak happened and knocked out 2 whitebark pine trees before we could cache anymore seeds.

4. List three adaptations of Clark's Nutcracker to aid in food collection.

1. *Large, strong bill*
2. *Spatial memory*
3. *Sublingual pouch*

5. How will white blister rust affect whitebark pine and Clark's Nutcracker?

White blister rust affects the whitebark pine because it weakens and kills the tree, this will have an impact on the amount of pine seeds that Clark's Nutcracker will be able to cache for the winter. Because scientists believe that whitebark pine depends on Clark's Nutcracker to disperse its seeds, if the Clark's Nutcracker changes its diet, the whitebark pine could be in trouble!

6. Draw a simple food web of the whitebark pine tree.

