

Abstract

Rather than going out into the field, we contacted specialists for different animal types (bird, plant, insect, shoreline, and amphibians) to find out what species would be important to track the progress of in terms of phenology. Phenology is the study of cyclic and seasonal natural phenomena, especially in relation to climate and plant and animal life. We focused mainly on how climate change affected these species.



Introduction

Our main question that we tried to answer was: Research the timing of life processes and how the changing climate is affecting certain species. Additionally, what island species should we research and track for trends in species processes and developments.

Phenology Citizen Science

Results

Island species that scientists responded as the most important and effective to track were: **barnacles, thatching ants, evergreen huckleberry, salal, and purple martins.** Though we received many more replies, we found these as the most important and we verified with the USA National Phenology Network website to ensure that these species were notable. Their website is usanpn.org



Discussion

From the results gathered we can conclude that these species are impacted directly by climate change. Thatching ants are becoming active earlier and therefore impacting some migratory predators. Barnacles have been known to have difficulty sticking to rocks when the pH of the water isn't neutral because of chemicals. Two important species of plants to keep track of are the evergreen huckleberry and salal, which have been developing diseases for unknown reasons. It is important to recognize the diseases in these plants because they are native, and they will be the first to show signs of disease before other nonnative plants. Purple Martins have been leaving earlier and coming back earlier due to milder winter weather. There are no current studies on any of these discussed species in the phenology database.

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Materials and Methods

Our methods of answering the question were talking to scientist and local specialists who may have noticed changes in species activities. On our separate map, you can see places where these species could be studied in the future.

Literature Cited

We got our information from the USA National Phenology Network as well as the scientists mentioned: Jeff Adams, Tom DeVries, Rayna Holtz, Alan Warneke, Ann Spiers, Erin Kenny, Gary Shugart, Ed Swan and Steve Caldwell.

By: Jessica Merritt, Mckenna Anderson, Sirena Martinez, Madeline Franchi, and Juliana Wright

Affiliation: Vashon Island High School