Through Citizen Science (Poster)

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The spatial and temporal availability of grizzly bear foods influences bear health and reproduction and is likely to change with the changing climate. Even short-term shortages of bear foods may increase bear movements into human settlements and the potential for conflicts, which may lead to increased bear mortality. However, climate drivers of bear food availability are poorly understood and few resources are available for long-term monitoring at a spatial scale to adequately connect food availability to climate. We are proposing to evaluate citizen science as a potential mechanism for researching and monitoring relationships of multiple bear food sources with climate change. We have several questions and are seeking input: 1) How much interest is there among various groups (e.g., Glacier National Park visitors, Salish tribal members, Blackfeet tribal members, backcountry horsemen, naturalists, conservation group members) in collecting these kinds of data? 2) What are the best protocols for citizen scientists to measure bear food availability across the ecosystem? 3) What would the ongoing costs be for coordinating a citizen science program? We will discuss several ideas for which we are seeking pilot project funding that will help to answer these questions, including 1) a geocaching app that would initially target park visitors and school programs to collect huckleberry phenology and berry abundance data, and 2) multiple ways to engage citizens in using National Phenology Network protocols.