

## **Patuxent Wildlife Research Center**

## Native Bee Status and Vulnerability to Climate Change in National Parks



**The Challenge:** Mountain tops and Coastal Dunes - These are perhaps the most vulnerable locations in the United States to climate change in the lower 48 states. Native bees also face challenges due to loss of the plants, from which they gather nectar and pollen, and from introduced diseases and general loss of habitat. Additionally, both Mountain Tops and Dunes contain bees that are only found in these isolated habitats. As regions warm and seas rise these species may be trapped without a place to go.



**The Science:** 90 National Parks will be working with us to survey their bee populations. They will have volunteers and interested staff setting out traps. Patuxent scientists will identify the specimens and analyze the data.



**The Future:** The status of most bee populations in the U.S. is unknown. Few National Parks know what bees are present on their property. Before we can manage bee populations we must know what bee species are present. We are focusing first on these vulnerable areas to get a better understanding of species involved and what are the risks due to changes in climate. Once the risks are identified then we can develop management and interconnection strategies.