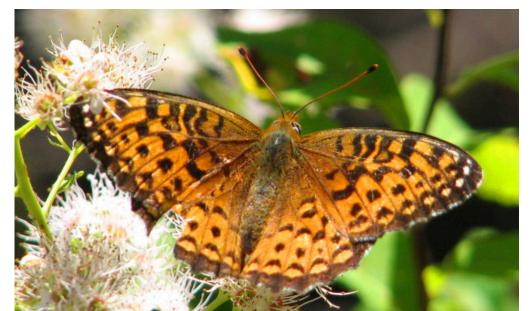
## **Climate Lab Student Materials**

## **Lesson 4 – Climate change ecology**



## **Activity 2: Trends around New England**

Figure 1-Atlantis Fritillary

In 1992, the Atlantis Fritillary butterfly was a common sight in western Massachusetts. Between 1992 and 2010, its population declined by 90%, leaving it in very real danger of vanishing altogether.



Figure 2- Frosted Elfin

At the same time, the Frosted Elfin butterfly, a rare sight in 1992, has seen a 1000% population increase in Massachusetts.

- 1. Do you think the Atlantis Fritillary is going extinct?
- 2. How do you think we could find out?

**3.** Looking at the whole country, we know that Massachusetts is at the southern end of the Fritillary's range. Does that change our idea about what's going on?

4.	The Frosted Elfin is at the <i>northern</i> edge of its range in Massachusetts.
	What do you think is a likely cause of its dramatic population increase?

**5.** Might the same thing be happening to the Atlantis Fritillary farther north?

**6.** Final question: What effect do you think these changes in butterfly populations might have on other species?