# Grizzly Bear and Human Use at Moth Sites in the Greater Yellowstone Ecosystem

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## Introduction

- Army cutworm moths (*Euxoa auxiliaris)* are an **important food for grizzly bear** (*Ursus arctos horribilis*).

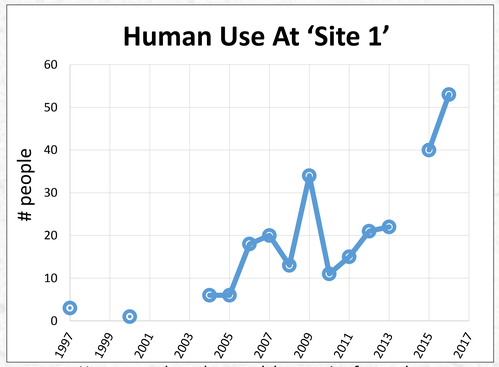
*Army cutworm moth*

- **Number of grizzlies foraging on moths has increased** since initial documentation in 1986 in the Shoshone National Forest, Wyoming.

- Feeding bears offer **unique viewing opportunity**

*Family group foraging moths*

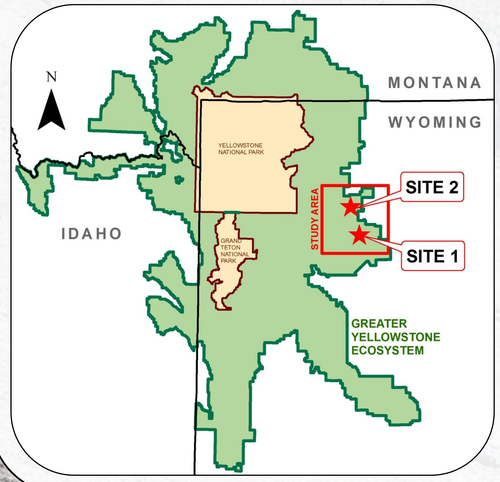
- People use moth site areas for bear viewing, professional photography and film, hunting, and hiking



*Human use based on peak log entries for study 'site 1' from 1997-2016.*

**high density bears + increased human use = potential management concern**

## Study Area




Our study sites are in the Absaroka Mountains of Wyoming.

## Objectives & Methods

**Objective 1: Quantify grizzly bear use of moth site areas**

*Methods: Surveys with spotting scopes and binoculars and opportunistic documentation*

**Objective 2: Quantify human use patterns of moth site areas**

*Methods: GPS tracking units and surveys to volunteer area users*

**Objective 3: Identify areas of bear-human interactions**

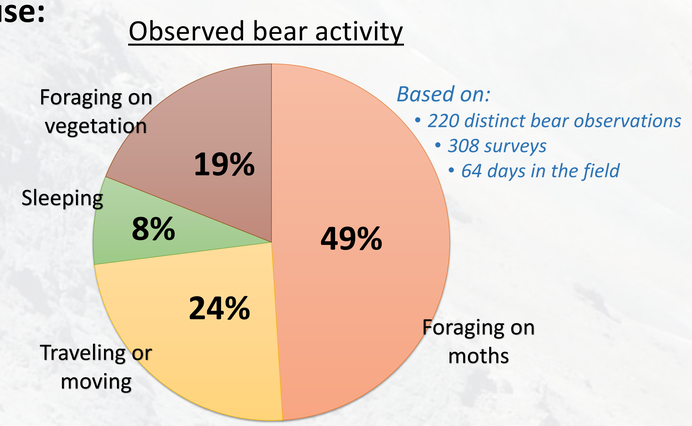
*Methods: Surveys, crew interaction data, bear locations and GPS tracking unit data*

**First field season efforts:**

Season: 7/10/2017 – 9/21/2017 (75 days)
4 crew members
Total field efforts: 64 days
~ 2000 hours

## Preliminary Results

**Bear use:**



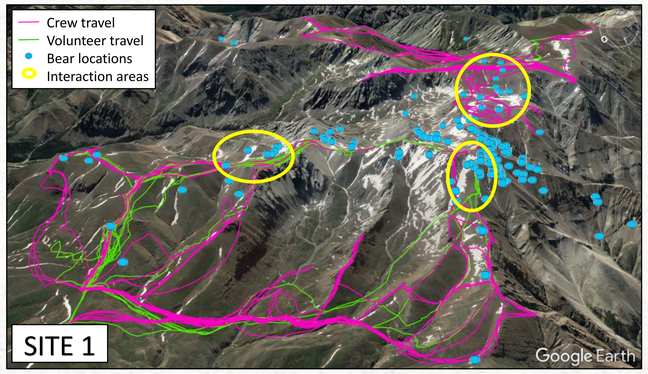

**Human use:**

| | # people documented | # days at site | # routes documented with GPS units |
|---|---|---|---|
| **SITE 1** | **72** | 49 | 18 |
| **SITE 2** | **7** | 15 | 0 |

- Majority of users were viewing bears and/or hiking
- Many users were **unaware of bears with no bear spray** or other protection.

**Bear-human interactions:**

- **18** bear-human interactions
  - Bears avoided humans
- **3 areas** identified where interactions common



*All travel route, bear location, and interaction data compiled for Site 1.*

- **All areas of interactions were high use travel routes common to bears and human**

## Questions?

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