

Dispersed Recreation Sites

Jewel Basin Hiking Area

Flathead National Forest, Flathead County Montana

Site data collected by Bigfork High School's AESOP Class

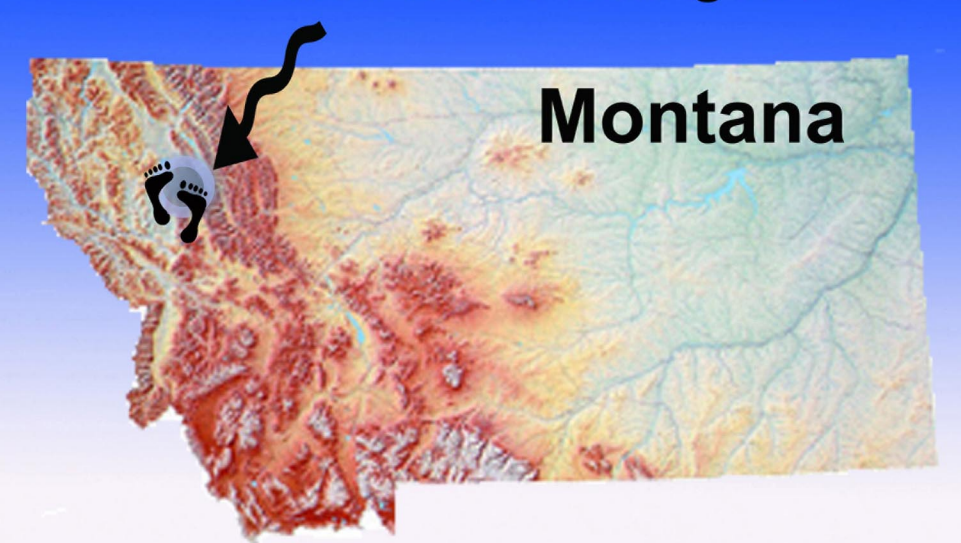
September 17, 2011

Map created by Jasmine Gannon

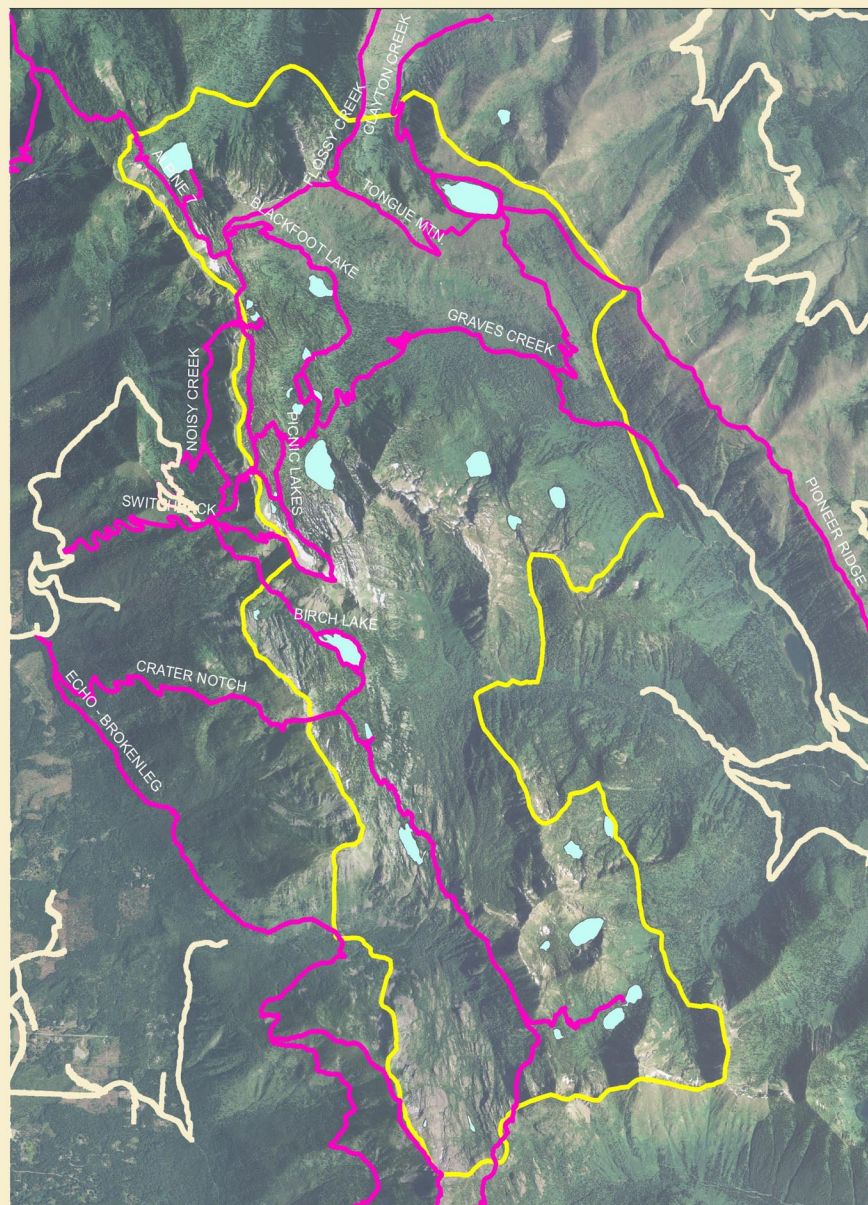
Updated January 20, 2013 by BHS AESOP Class

Location Map

Jewel Basin Hiking Area



Center of Jewel Basin Hiking Area:
N48 8'50" W 133 54' 10" GCS: NAD 1983



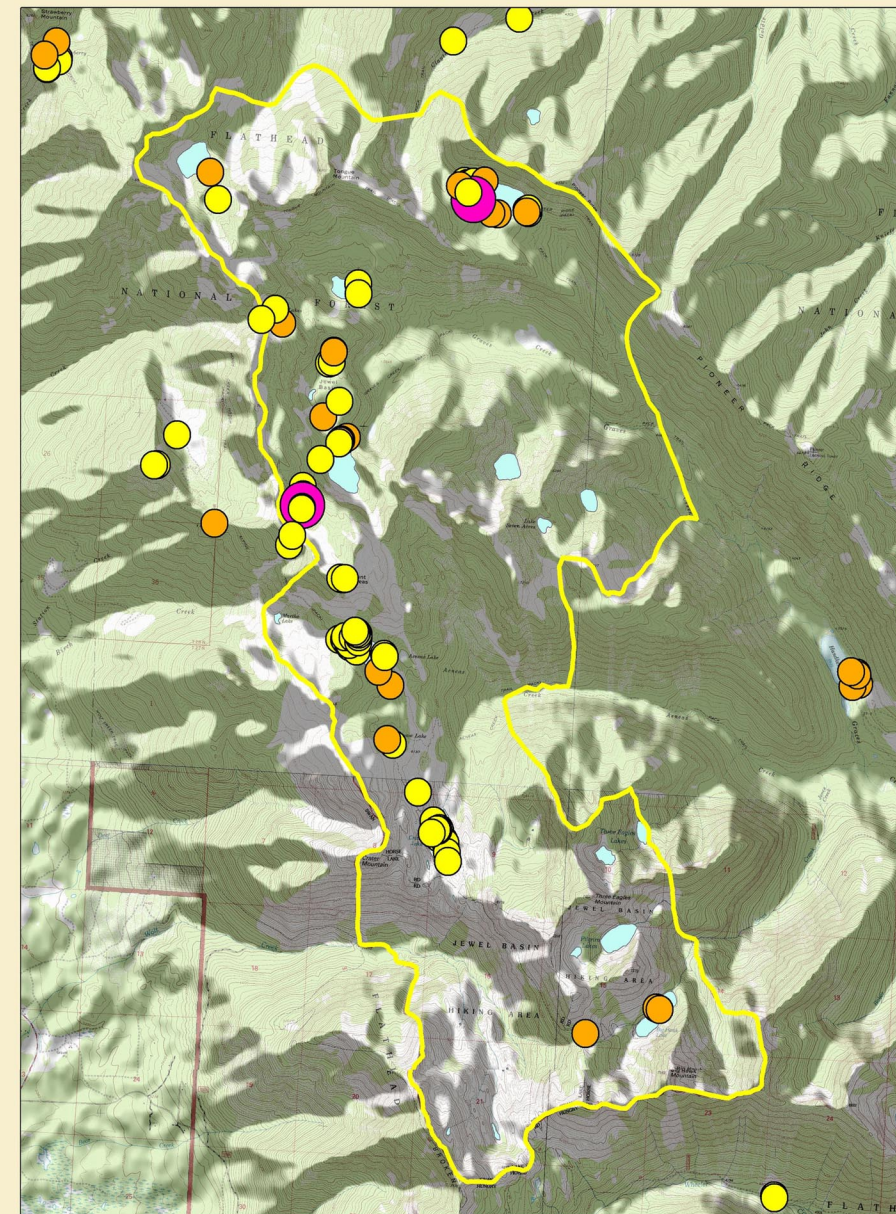
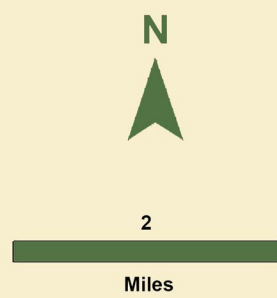
Imagery, Trails, Lakes, and Dispersed Sites

Jewel Basin Hiking Area, located east of Kalispell, Montana, is 15,349 acres of alpine ecosystems including 27 lakes and 35 miles of trails. The Jewel Basin is specially designated for hiking only.

Dispersed recreation (activities that take place outside of developed camping or concessionaire-operated facilities) has some impacts on the natural character of the Jewel Basin Hiking Area.

BHS AESOP Class inventoried 111 dispersed recreation sites (camping and day use sites). Inventory included photographing the site, measuring site length, assessing damage to vegetation, soil erosion, and counting fire rings and nonmotorized routes.

- Jewel Basin Boundary
- Hiking Trail
- Gravel Road
- Lake

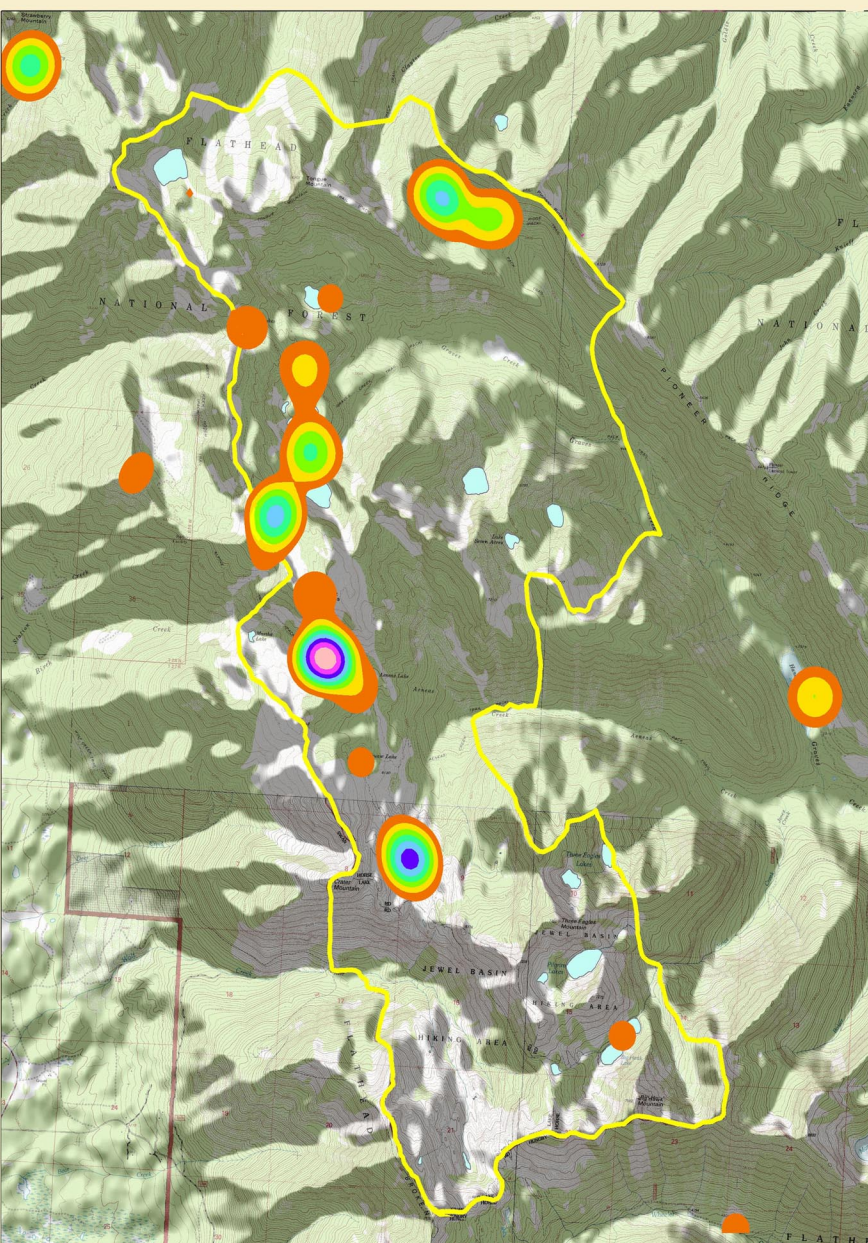
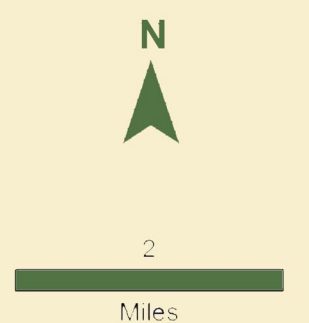


Fire Rings at Dispersed Sites

Campfires have been leaving long lasting impacts at dispersed sites. For this reason campfires are prohibited within 300 feet of Twin Lakes, Picnic Lakes, Birch Lake, and Crater Lake. Patrol rangers have dismantled fire rings at most sites throughout Jewel Basin, but visitors continue to rebuild the ring and make campfires. The BHS Aesop class counted 43 camp fire rings during their inventory, five at sites where they are prohibited.

Number of fire rings per site

- 2 or more
- 1
- 0
- Boundary
- Lake

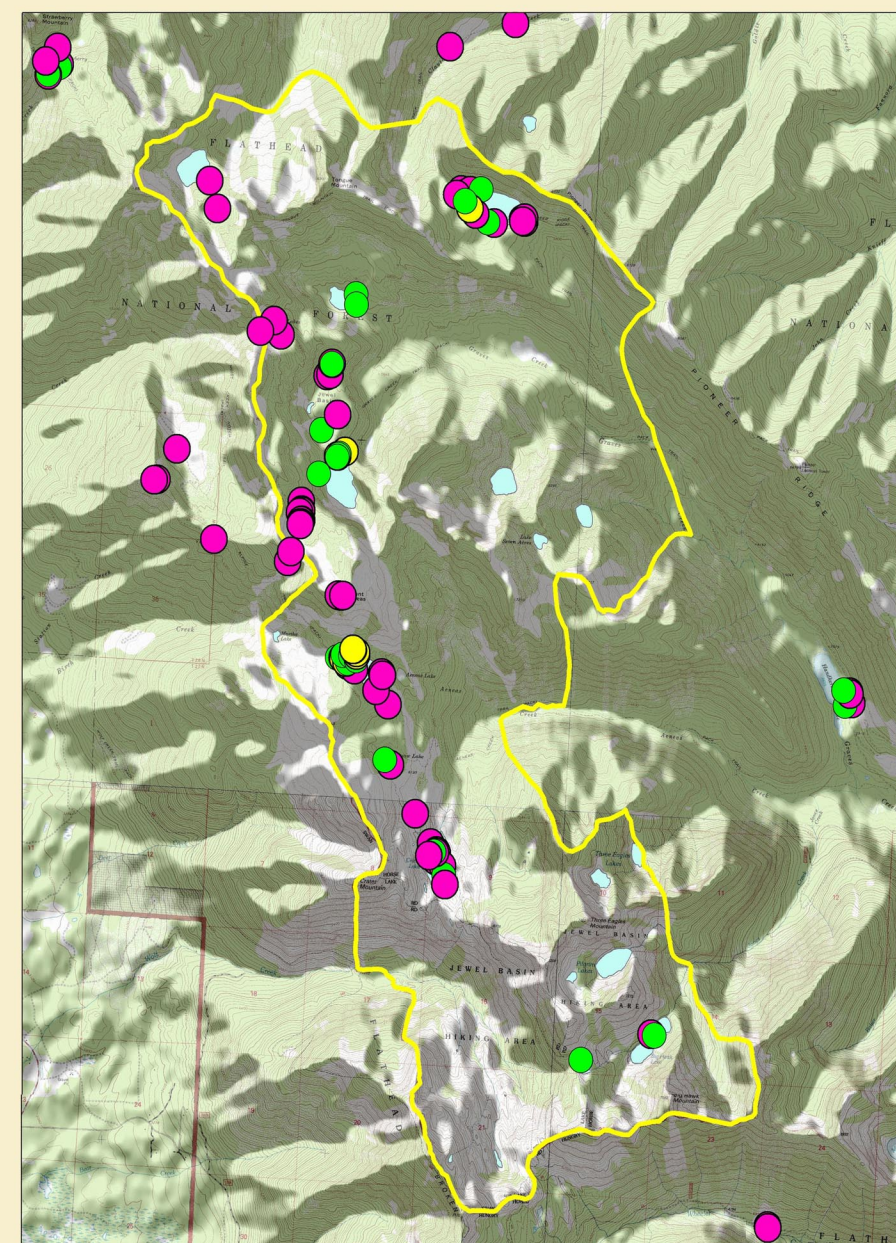
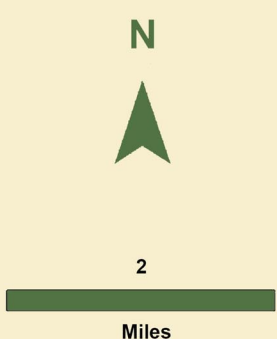


Dispersed Site Density

BHS's Aesop class used ArcGIS to calculate kernel density plots for dispersed recreation sites in the Jewel Basin. Sites are densest at the northeast end of Birch Lake. Here sites average about 400 feet away from one another. Sites are also dense on the northeast end of Crater Lake, the northeast end of Picnic Lake and the north end of Black Lake.

Site Density sites per sq mile

- 15 - 45
- 45 - 59
- 60 - 75
- 76 - 90
- 91 - 105
- 106 - 120
- 121 - 136
- Jewel Boundary
- Lake



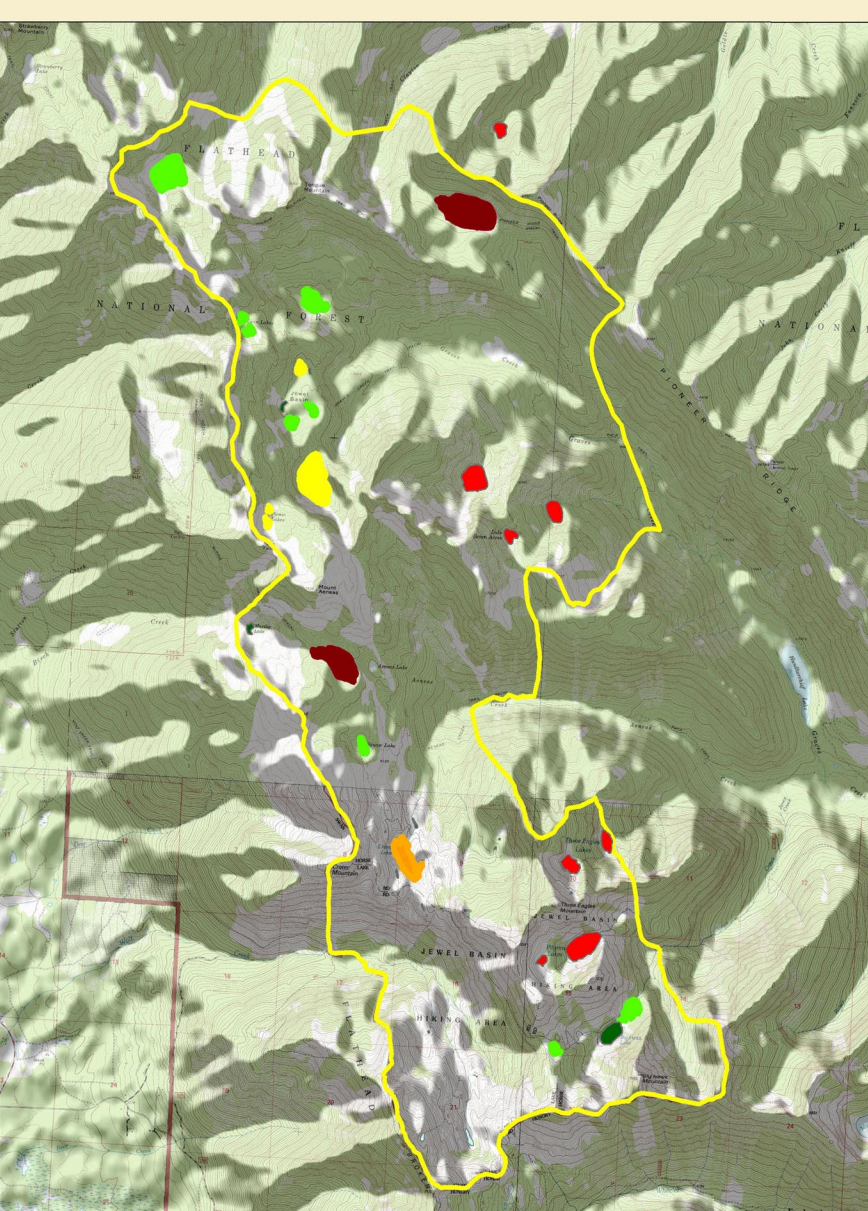
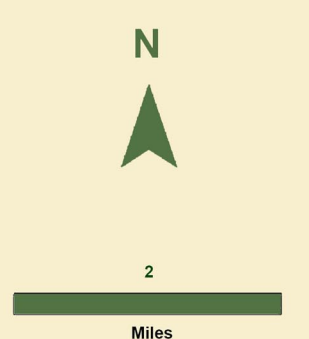
Number of Nonmotorized Routes exiting Dispersed Site

Non motorized routes, or foot trails, are used by visitors repeatedly entering and exiting a site. A greater number of nonmotorized sites indicates that the site is more frequently used.

In Jewel Basin the average number of non motorized routes exiting dispersed recreation sites was 2.35. About 65% of the sites had only 0 or 1 route exiting. The greatest number of routes exiting was 9. Two sites had 9 routes these were both at Birch Lake.

Number of Non Motorized Routes

- 0 - 2
- 3 - 6
- 7 - 9
- Jewel Boundary
- Lake



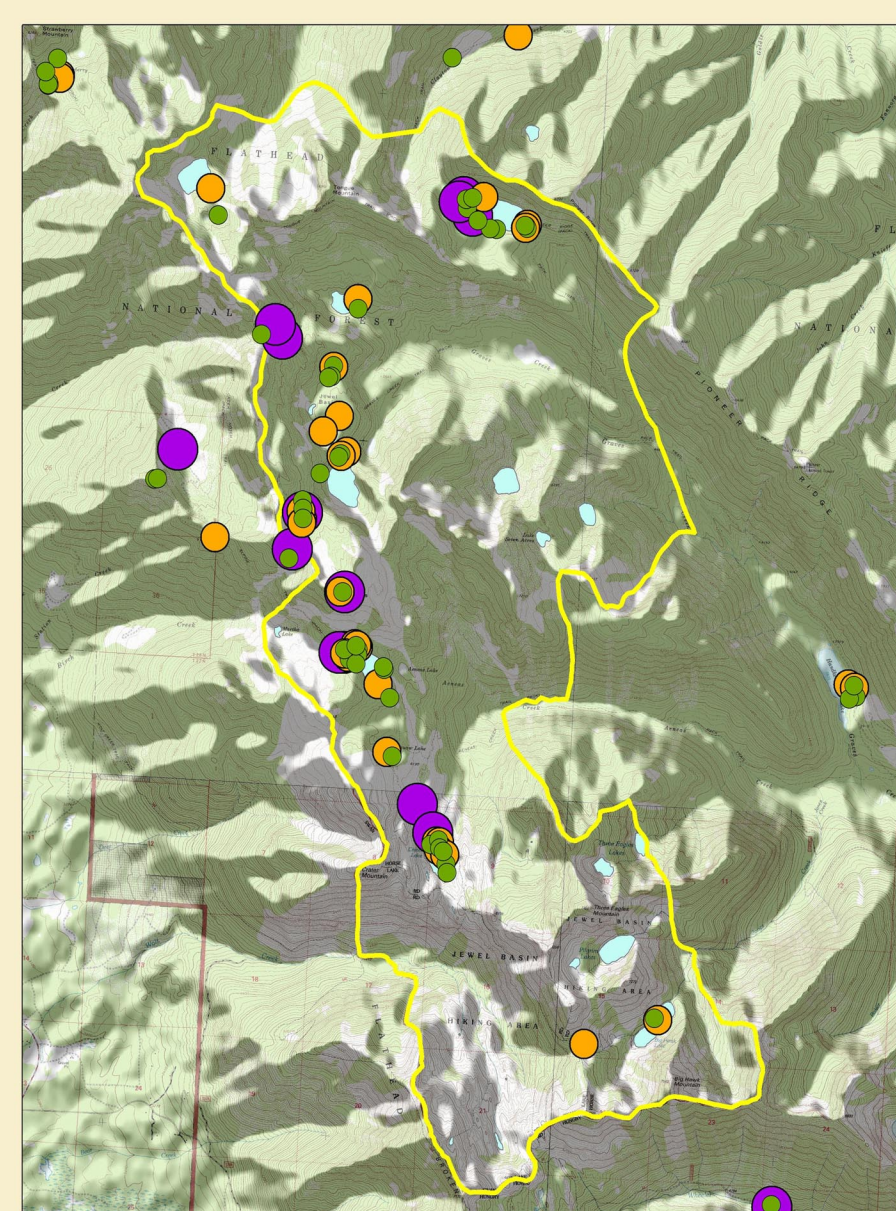
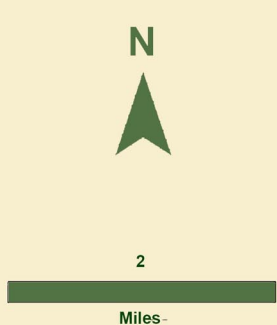
Number of Dispersed Sites near Lakes

Jewel Basin's numerous lakes are popular destinations for day hikers and campers. Lakes that are easy to access and of high scenic value are most popular.

BHS's AESOP class counted the number of dispersed sites around each lake they visited. Birch Lake had the most sites at 19. Next was Crater Lake at 12 and the Picnic Lakes at 4. All other lakes had 3 or less dispersed sites near their shores.

Number of site near lake

- Not surveyed
- 0 - 1
- 2 - 3
- 4 - 7
- 8 - 12
- 13 - 19
- Jewel Boundary



Dispersed Recreation Site Lengths

Site lengths were measured with a fiberglass tape. Site length is the longest distance across the total area within the site which has been impacted by camping or other recreational activities. Impacts include damage to vegetation, bare areas resulting from trampling, and charcoal covered areas. Site lengths are longer for sites used more frequently and by larger groups.

In the Jewel Basin Hiking Area the average site length was 36.8 ft. 70% of the sites were less than 45 feet long. The longest sites were near the radio site at Mt. Aeneas, Birch Lake and Picnic Lake. These sites measured 104, 94, and 90 ft.

Recreation Site Lengths (in feet)

- 6 to 35
- 36 to 67
- 68 to 104
- Jewel Boundary

