



# Glacier National Park Educational Opportunities 2016-2017



National Park Service  
U.S. Department of the Interior  
Glacier National Park



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Glacier National Park  
P. O. Box 128  
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Glacier National Park's education programs are made possible through the generous support of the Glacier National Park Conservancy.

## 2016 - 2017 Glacier Educational Opportunities

This handout describes the park's field trip options, educational trunk materials, and partner education options for the coming school year. Ranger/NPS Staff-led field trips are offered on both east and west sides of the park at no cost (see the areas on the map for field trip locations). A fee waiver will be processed by the park's Education Specialist to cover the entrance fees. These programs must be reserved in advance and fill quickly. Reservations are done on-line, starting at 8 a.m. August 22, 2016. More information about each field trip as well as the online reservation form and pre- and post-visit lesson plans can be found on our website: <http://www.nps.gov/glac/learn/education/index.htm> .

We also realize that these programs may not fit your needs and that you may want to bring a group on your own. Again, please visit our website, <http://www.nps.gov/glac/learn/education/selfguided.htm> for information about self-guided field trips and to obtain your own fee waiver application.

### Field Trips

#### Senses (Grade K), Wildlife (Grade 1) and Habitats (Grade 2) - Spring & Fall

These three different programs all use the mountains, forests, lakes/streams, and meadows in the park to help young students learn about senses, plant and animal growth stages, habitat requirements, and the National Park Service mission of preservation. Hikes are less than one mile and are combined with other learning activities.

**West Side/Apgar:** The day can include a puppet show, Discovery Stations with examination of animal skins and skulls, a short hike on the Oxbow Trail, and a ranger-

led concluding activity.

**Note:** West side/Apgar kindergarten "Senses" programs are half-day with a ranger, and half-day with teacher-led activities.

**East Side/St. Mary:** The day will include activities in and around the historic 1913 Ranger Station, a hike on the Beaver Pond Loop Trail, and a ranger-led concluding activity. Lessons focus on human and animal senses, the needs of wild animals, and their habitats.

#### Forest Processes (Grades 3-4) and Fire Ecology (Grades 4-5) - Spring & Fall

Both of these programs take students on one- to two-mile hikes with a ranger into an old growth coniferous forest or the aspen parklands. They provide opportunities for elementary students to learn about photosynthesis, nutrient cycling, succession, disturbance, fire and forest ecology, wildflowers, and American Indian uses of both plants and animals. Rangers guide students through activities using a variety of materials such as: scavenger hunts, dichotomous keys, and counting tree rings. Groups consider the history of fire in Glacier and its role as a natural process.

**West Side/Apgar & Avalanche:** The Forest Processes Program combines a hike on the Trail of the Cedars with activities in the Avalanche Picnic Area. On the Fire Ecology Program, students view the area burned by the 2003 Robert Fire by hiking the Rocky Point Trail.

**East Side/St. Mary:** In St. Mary, the Beaver Pond Loop Trail is excellent for exploring forests. The trail goes through the area of the Red Eagle Fire of 2006 and provides an opportunity to learn about succession and fire adapted species.



### Earth Science (Grades 5-9) - Spring & Fall

The Avalanche (Lake McDonald Area) and the Grinnell Glacier Valleys (Many Glacier), provide evidence of a range of geologic processes that have shaped the landscape. Rangers lead students on a four-mile hike and explore sedimentation, mountain building, glaciation, rocks and minerals, erosion,

weathering, and soil formation. The length of these hikes and level of information is geared toward secondary school students and is a challenge to fit into a regular school day schedule. The ability to have an extended field day is recommended for this program.



### Native Plant Restoration (Grades 6-12) - Spring & Fall

The park's Native Plant Restoration Program offers field trips on both east and west sides of the park to help with seed collecting, planting, and learning about the human impacts to the landscape and the importance of restoring

native plants. These are generally, hands-on, half-days with students getting down into the dirt doing service learning. Teachers often combine this field trip with a short hike or other park activity.



### Winter Ecology Programs (Variations for all Grades) - January, February, March

All winter ecology programs on both west and east sides of the park include snowshoe hikes. The park provides all the snowshoes for the students and chaperones free of charge. Depending on the age of the group

and the area visited, students may also explore the physical properties of snow, animal tracks, winter adaptations, snow caves, snow metamorphism, variations in snow density, and the importance of snow surveys.

### Typical Field Trip Schedule

No two school programs are exactly alike, but the following represents a typical schedule. If your school is closer to the park, or has earlier or later dismissal times, this schedule can be adjusted. Make sure to consider adequate travel time (especially if there is inclement weather) for your park visit.

9:30-10:00 a.m.  
Bus arrives

10:00-10:30 a.m.  
Park introduction & the National Park Service Mission

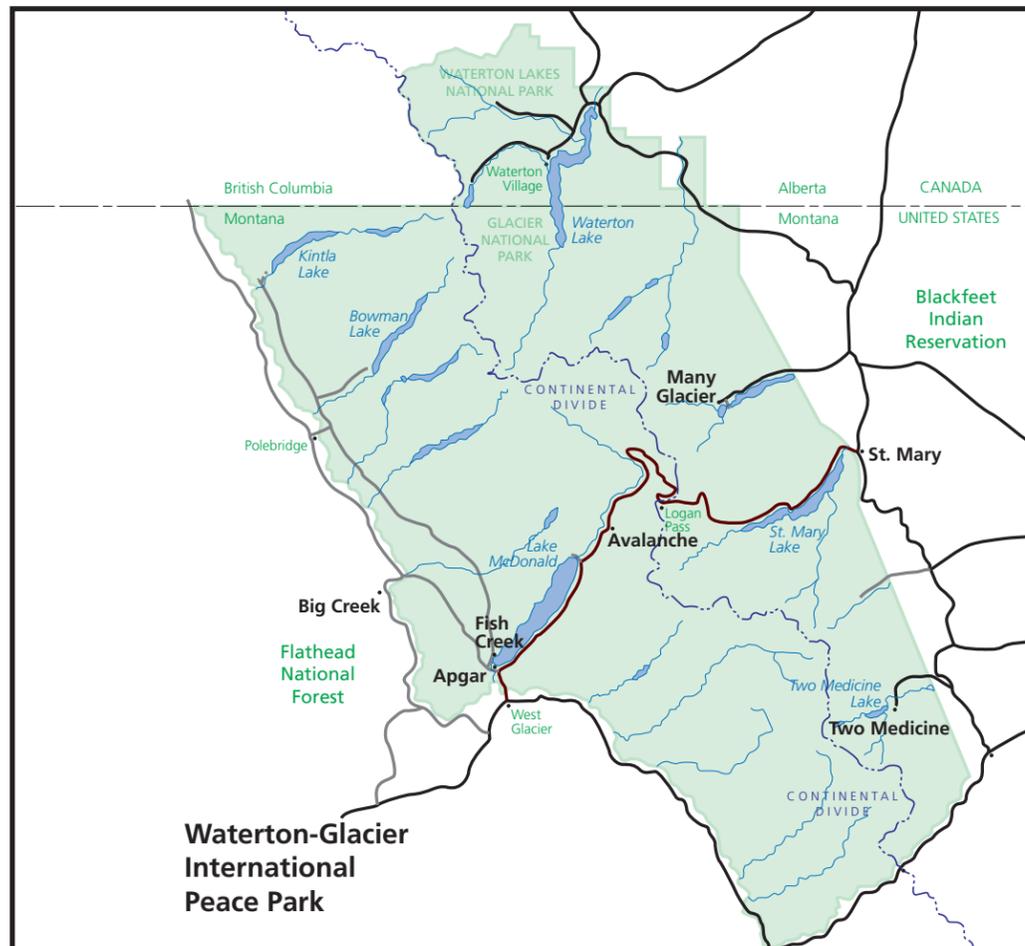
10:30-11:30 a.m.  
Session 1 of park-led activities

11:30-12:00 p.m.  
Lunch and clean-up

12:00-1:00 p.m.  
Session 2 of park-led activities

1:00-1:30 p.m.  
Concluding activity and final assessment

1:30-1:45 p.m.  
Bus departs



### Scheduling a Field Trip

Requests for field trips must be submitted online through the park's website. Reservations will be accepted starting August 22, 2016 for the entire 2016-2017 school year. Program availability is first-come, first-served. Go to our website and complete the program reservation form at <http://www.nps.gov/glac/learn/education/rangerguided.htm> for the program you are interested in. Be prepared to select which program you want, the date (with 2nd and 3rd choice options) and your contact information.

You will see that group size is generally limited to 60 students but may be even fewer on days when ranger staffing, facilities or equipment are limited (45 students for snowshoeing). The



### Travel Grants

For schools with restricted travel budgets, there are travel grants available thanks to donations to the Glacier National Park Conservancy. The grants are available to schools who are participating in any Glacier staff-led field trip. Grants are awarded first-come, first-served in amounts varying on the

number of chaperones will be determined by the age of the students and the program selected. Objectives for each field trip, vocabulary and more information are also available on our website at <http://www.nps.gov/glac/learn/education/rangerguided.htm>.

### Fall programs:

September 12, 2016 - October 28, 2016.

### Winter programs:

January 9, 2017 - March 17, 2017.

### Spring programs:

May 1, 2017 - June 2, 2017.

### Contact:

Glacier Education Specialist, 406-888-5837, or [laura\\_law@nps.gov](mailto:laura_law@nps.gov).

## Other Educational Opportunities

### Educational Trunks

Nine engaging educational trunks are available for educators to borrow at no charge, for a month at a time. The trunks must be picked-up from, and returned to, West Glacier, MT. Information about the trunks and their contents can be found at <http://www.nps.gov/glac/learn/education/travellingtrunks.htm>.

- Bear Trunk (Grades K-12)
- Climate Change Trunk (Grades 6-12)
- FireWorks Trunk (Grades 3-12)
- Glacier's Plant Invaders (Grades 3-12)
- Glacier Repeat Photo Trunk (Grades 6-12)
- Land of Many Stories (Grade 4)
- Skulls Kit (Grades 3-12)
- Songbird Kit (Grades 4-6)
- Wolf Trunk (Grades K-12)



### Glacier Institute

The Glacier Institute is a nonprofit organization providing quality outdoor education to people of all ages through exceptional field and science-based learning experiences. The Institute offers many courses that provide Montana Office of Public Instruction renewal units for professional development. The Big Creek Outdoor Education Center in Flathead National Forest, is staffed by experienced naturalists and offers overnight accommodations to school groups participating in the Institute's Discovery School courses. Please contact the Glacier Institute Office at 406-755-1211 or visit their website at <http://www.glacierinstitute.org>.

### Concessions

Tour companies that operate in the park occasionally offer reduced rates for school groups. Call each company for updated information and pricing:  
Glacier Park Boat Company, 406-257-2426.  
Sun Tours, 1-800-786-9220 or 406-226-9220.  
Red Bus Tours, 855-733-4522.

