Glacier

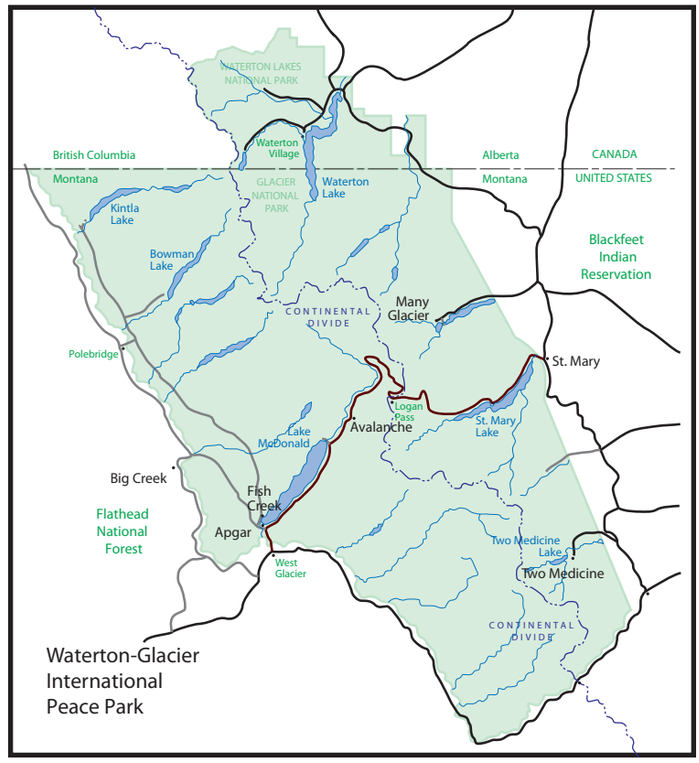
National Park Service
U.S. Department of the Interior

Waterton-Glacier
International Peace Park
World Heritage Site

2012 -2013 Educational Opportunities

Dear Educator:
This handout describes the park's ranger-led field trip options, educational trunk materials, and partner education/tour options for the coming school year. Ranger-led field trips are offered on both east and west sides of the park at no cost (see the areas on the map at right for field trip locations). A fee waiver will be processed by the park's Education Specialist to cover the entrance fees. The outdoor lessons are designed to be hands-on and to merge the natural and cultural resources found in Glacier with the vocabulary and concepts being taught in your classroom. More information about each field trip as well as pre- and post-visit lesson plans can be found on our website http://www.nps.gov/glac/forteachers/ .

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/forteachers/ for information about self-guided field trips and to obtain your own fee waiver application.



Senses, Habitats, Wildlife
Grades K-2
Spring & Fall

These ranger-led programs use the mountains, forests, lakes/streams, and meadows in the park to help young students learn about habitat requirements, plant and animal growth stages, and the National Park 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 Cabin stations with examination of animal skins and skulls, a short hike on the Oxbow Trail, and a ranger-led concluding activity.
Note: 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, habitats and the needs of wild animals.

Forests & Native Plants
Grades 4-8
Spring & Fall

One- to two-mile hikes with a ranger into the old growth coniferous forest or aspen parkland provide opportunities for elementary students to learn about photosynthesis, nutrient cycling, succession, disturbance, forest ecology, wildflowers, and American Indian uses of both plants and wildlife.

West Side/Apgar & Avalanche: Depending on the group age and time of year, a hike on the Trail of the Cedars will be combined with activities in the **Avalanche** picnic area
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East Side/St. Mary & Two Medicine: In **St. Mary**, the Beaver Pond Loop Trail, the St. Mary Falls Trail, and the Sun Point Trail, are excellent for exploring forests. In **Two Medicine**, the Running Eagle Falls Trail and the S. Shore Trail offer great teaching spots.

Fire Ecology
Grades 4-12
Spring & Fall

Rangers guide students through activities such as: scavenger hunts, using dichotomous keys, examining tree rings for fire scars, and/or watching demonstrations of fire behavior. Groups consider the history of fire in Glacier and its role as a natural process on these 2-3 mile hikes.

West Side: Students view the area burned by the 2003 Robert Fire by hiking the Rocky Point Trail which starts at the **Fish Creek** Picnic Area.

East Side: Students view the area burned by the 2006 Red Eagle Fire by hiking the Read Eagle Lake Trail from the 1913 Ranger Station in **St. Mary**.

Earth Science
Grades 5-12
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 4+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 age 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 & Stewardship
Grades 7-12
Spring & Fall

For secondary school students, the native plant program offers field trips on both east and west sides of the park to help with seed collecting, planting, and learning about native plant restoration.

These are hands-on, work days for students to do service learning. Contact the Native Plant Nursery at 406-888-7835 to find out about restoration projects your students could be involved in.

Winter Ecology Variations for all Grades
January - March

All winter ecology programs on both west and east sides of the park include snowshoe hikes. The park provides all the snowshoes for 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 ranger introduction & the National Park Service Mission
10:30 - 11:30 a.m. - Session 1 of ranger-led activities
11:30 – 12:00 p.m. - Lunch and clean-up
12:00 – 1:00 p.m. - Session 2 of ranger-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

Reservations will be accepted starting August 20, 2012 for the entire 2012-2013 school year. Program availability is first-come, first-served. Call or email soon, as dates fill up quickly!

Fall programs:
September 10, 2012 - October 17, 2012.

Winter programs:
January 9, 2013 - March 15, 2013.

Spring programs:
April 29, 2013 - May 31, 2013.

Contact:
Laura Law, Glacier Education Specialist
406-888-5837, or email laura_law@nps.gov .

Group size is generally limited to 60 students but may be fewer on days when ranger staffing, facilities or equipment are limited (40 students for snowshoeing). The number of chaperones will be determined by the age of the students and the program selected.

When you email or call to schedule your visit, be prepared to explain/discuss your field trip objectives and the topic you want to focus on. (Objectives for each field trip are available on our website at www.nps.gov/glac/forteachers/ .) You will need to provide a contact phone number, email address, group size, school address, approximate park arrival and departure times, and the date you are interested in. It's a good idea to have alternate trip dates in mind in case your first choice is taken.

Travel Grants

For schools with a restricted travel budget, there are a limited number of travel grants available through the Glacier National Park Fund to assist with busing. This offer applies to schools who are participating in one of our ranger-led or service-learning field trip options. Grants are awarded first-come, first-served in amounts varying on the distance the bus has to travel to the park. To apply for a travel grant, complete the travel grant form on our website at http//www.nps.gov/glac/forteachers/planafieldtrip.htm and return it by fax, email or US Postal Service per the instructions on the form.

GLACIER
NATIONAL PARK FUND

Educational Trunks

Educational trunks and materials can be borrowed for 2-4 weeks at no charge as long as you can pick-up and return them to West Glacier, MT. Occasionally, we have staff who can do a presentation at your school with the trunks. **Contact:** Laura Law, Glacier Education Specialist, 406-888-5837, or email laura_law@nps.gov .

Wolf Trunk (Grades K-12)
Bear Trunk (Grades K-12)
Skulls Kit (Grades 3-12)
FireWorks trunk (Grades 3-12)
Songbird Kit (Grades 4-6)
Glacier's Plant Invaders (Grades 3-5)
Land of Many Stories (Grade 4)
Climate Change Kit (Grades 6-8)

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; Glacier Park Inc. (Red Jammer Buses), 406-863-4727.