Battle of Lava and Life
Summer Session 2009

Suggested Trip Packet Materials

We do not provide a trip guidebook. Instead each trip participant is provided with a packet (in a manila envelope) of materials at the pre-trip meeting, usually 1 week before departure. The packet includes a copy of the syllabus, equipment list, a release form, pre-trip questions for Geology and Biology and copies of maps, diagrams, papers, etc. that may be used in answering pre-trip questions or that can be referenced in the field. This is a list of suggested packet materials that we used when running the trip but it can certainly be modified for your own trip. Note that I have included geology packet material only; Biology packet materials included are not listed here.

Syllabus and trip itinerary
Release form for field trip travel
Term paper guidelines

Geology pre-trip questions
Biology pre-trip questions

Copies of figures 1, 8 and 10 of Martin, B.X., Petcovic, H.L. and Reidel, S.P. (2005) Goldschmidt Conference Field Trip Guide to the Columbia River Basalt Group. Prepared for the U.S. Department of Energy.

Map of the Central Oregon High Cascades – graphic available from the Cascades Volcano Observatory - http://vulcan.wr.usgs.gov/Volcanoes/Oregon/Graphics/framework.html

Index map showing Newberry volcano and vicinity – graphic available from http://vulcan.wr.usgs.gov/Volcanoes/Newberry/description_newberry.html

Notable events ant Newberry volcano during the past 15,000 years – graphic available from http://vulcan.wr.usgs.gov/Volcanoes/Newberry/EruptiveHistory/newberry_eruptive_events.html

Map of Crater Lake National Park and vicinity – graphic available from http://vulcan.wr.usgs.gov/Volcanoes/CraterLake/Locale/framework.html

Cascade eruptions during the past 4000 years – graphic available from http://vulcan.wr.usgs.gov/Volcanoes/Cascades/EruptiveHistory/cascades_eruptions_4000yrs.html

Types of volcanoes – graphic available from http://vulcan.wr.usgs.gov/Glossary/VolcanoTypes/volcano_types.html

Volcanic rock classification diagram – Total Alkali – Silica (TAS)

Characteristics of magma chart in terms of magma type, rock, chemical composition, temperature, viscosity and gas content

Types of volcanic eruptions – graphic available at http://media-2.web.britannica.com/eb-media/48/4948-004-9AC9A872.jpg

Summary graphic illustrating the eruption of Mount Mazama available from http://pubs.usgs.gov/fs/2002/fs092-02/

Mount Mazama and Crater Lake: Growth and Destruction of a Cascade Volcano – USGS Fact sheet 092-02 http://pubs.usgs.gov/fs/2002/fs092-02/

Alphabetical list of volcanic terminology

Shaded relief maps of Crater Lake region – Figures 1 and 2 from

Cross-section of Hole-in-the-Ground maar

Cross-sections of tuff rings, tuff cones and pit craters

Various figures (e.g., 1, 5, 6, 7, 8) from

Copy of figure 2 from Schmidt, M.E. and Grunder, A. ((2009) The evolution of North Sister: A volcano shaped by extension and ice in the central Oregon Cascade Arc. Geological Society of America Bulletin, v. 121, p. 643-662.