IGS Style Guide

These standards follow much of the USGS *Suggestions to Authors* (7th ed., 1991) online at: http://www.nwrc.usgs.gov/lib/lib_sta.htm.

Different formats are established for the Annual Report and some brochures. Consistency is the overall goal.

In-Text Citation Guidelines

Authors/Sources

-Use 'and others' in place of *et al.* for three or more authors. See below for proper citation as references.

There is a carbonate bank in east-central Idaho (Skipp and others, 1979.) Layering of sediment and whoknowswhat (Lewis and others, 2009; Lonn and others, 2010).

-Oral and written communication is listed in the narrative text, but not in the References section. The individual's name should be listed in full, followed by 'oral commun. / written commun.' and the year. You should abbreviate 'communication.'

Southern Idaho is full of basalt (Joe Obvious, written commun., 2013).

-Manuscripts accepted for publication and scheduled for release should use 'in press' in place of a date when citing within the text. Do *not* use this term to describe anything in progress, unfinished research, or documents submitted for publication. A citation will be needed in the Reference list for all 'in press' manuscripts.

Vitrophyre is found near the Lochsa River (Lewis and others, in press). (In Reference list) Lewis, R.S., and Stanford, L.R., in press, Geologic map of...

-When citing websites, use the website name in place of the author and include the date. There is abundant water in the aquifer (Idaho Department of Water Resources, 2013).

<u>Compound words</u> **Space provided to add your own commonly used words and phrases** -Some words are combined without a hyphen:

floodplain postglacial proglacial noncalcareous website

-Others are not combined and lack a hyphen:

non uniformly
non deformed
cross section
ground water (IGS has accepted this spelling as standard)
web page

-Many are hyphenated. Examples include words combined to form a unit modifier immediately preceding the term modified:

fine-grained granite

fine- to medium-grained granite

Early- to Middle-Jurassic (note use of capitalization, topic under debate)

soft-sediment deformation

low-angle detachment

flat-lying sediment

salt-and-pepper diorite

well-developed foliation

large-scale cross beds

pinch-and-swell layering

northwest-striking (cardinal direction with adjective use hyphen)

whole-rock geochemistry*

major-oxide analysis*

trace-element chemistry*

-If the second element of a compound predicate adjective is a present or past participle, no hyphen is needed:

The granite is fine grained.

The sandstone is ledge forming.

-A two-word modifier is written without a hyphen if the first word is an adverb ending in "-ly"; a three-word unit modifier is written without hyphens if the first two words are adverbs. Do not use a hyphen for a two-word modifier if the first element is a comparative or superlative

thinly bedded sandstone
unusually fine grained granite
very well defined curve
better drained soil
larger sized grains
best preserved specimen
poorly sorted silty clay

-In stratigraphic sections, well logs, and similar lists, unit modifiers follow the noun they modify and are hyphened according to the rules used when they precede the noun.

Sandstone, bluish-gray, coarse-grained, highly shattered Granite, dark-gray, thick-bedded, large-grained

-A compound color term is hyphenated if the term becomes a unit modifer:

Light-green shale Greenish-gray chert Pale-yellow shale Dark-red sandstone

-A compound color term is **not** hyphenated unless the term becomes a unit modifer:

The basalt is dark gray to black.

The shale is olive green to blue green.

Some tuff is pale pink to dark gray.

-The hyphen is not used if the first word of a three-word unit modifier is an adverb that modifies the second, or if the first two words are adverbs:

Very fine grained sandstone

Very well defined surface Very dark gray to black shale Unusually well preserved specimen

General Hyphen Use

-Combining forms, prefixes, and suffixes do not ordinarily require a hyphen. Exceptions are the prefixes 'ex,' 'self,' and 'quasi.' Use a hyphen to join a prefix to a capitalized word, to avoid doubling a vowel or tripling a consonant, or prevent mispronunciation or change the word meaning.

```
ex-governor
self-control
un-American
mid-April
anti-inflation
co-op
un-ionized (not ionized versus unionized)
```

-Words ending in '-like' are not hyphenated except to avoid tripling a consonant or when the first element is a proper name.

lifelike December-like ball-like

Capitalization

-Capitalize formal stratigraphic terms only:

Prichard Formation
Lime Creek Member
lower member of Prichard Formation (informal)
quartzite of Lem Peak (informal)
Idaho batholith (informal)
Cougar Creek complex (informal)

Numbers and Measurements

-For thicknesses, lengths, widths, distances, etc., use metric unit first, then the English unit. Both should be abbreviated without full points (aka periods).

The basalt flow is 10 m (30 ft) thick. The sediments are 1-3 m (3-10 ft) thick. The site is 16 km (10 mi) from town. The outcrop is about 30 m (90 ft) high.

-For a range of measurement use 'ranges from,' and 'to' instead of a hyphen. Also, use the phrase 'in thickness,' not the word 'thick.' Do *not* use the word 'range' unless both limits are given.

The unit <u>ranges</u> from 7 <u>to</u> 30 m (22 <u>to</u> 100 ft) <u>in thickness</u>. The crystals <u>range</u> in length from 3 <u>to</u> 8 mm.

The pebbles reach a maximum of 5 cm [rather than 'range up to 5 cm'].

-If metric units are different and sizes range, use 'to' or convert to the same unit.

Plagioclase crystals are 3 mm to 2 cm long.

-Avoid the phrase 'up to;' instead use 'as much as' or 'as thick as.'

The crystals are as much as 7 mm long. Beds are as thick as 10 m.

-Insert commas into elevations, and cite according to map scale. On a 1:24k scale map, use feet; on a 1:100k scale map use meters with feet in parentheses.

(1:24k) Mount Hyndman has an elevation of 12,009 ft.

(1:100k) Mount Borah has an elevation of 3,861 m (12,668 ft).

-When number values are not assigned, write out the metric unit but do not add English units in parentheses. Do not follow metric units with English units for crystal sizes, small-scale features and outcrop features (these have been arbitrarily set as anything less than 1 meter*).

The basalt outcrop was hundreds of meters in length.

The unit has decimeter-scale layering.

Flows range from tens to hundreds of meters thick.

Phenocrysts in size from 3-8 mm (do not add English equivalent).

-Numbers less than 100 preceding a unit modifier containing a figure are spelled out. A hyphen is placed between the figure and the modifier.

We tested twelve, eight-centimeter core samples from the gneiss.

Names and Descriptions

-Spell out acronyms the first time used, and then refer to acronym in the remaining text. Do not use acronyms to start a sentence (spell out instead).

The International Union of Geological Sciences (IUGS) terminology... (same pretend text, page five). The IUGS nomenclature...

The Snake River Plain (SRP) has a multitude of...

-Do not use the phrase 'map area,' but rather 'map' or 'area' or 'quadrangle.' Use 'in map' not 'on map.'

The basalt in the northern part of the quadrangle...

The stratigraphy is exemplified in the map in the southwest portion of....

-Spell out cardinal directions in the text (as opposed to section location) rather than abbreviating them (i.e. NW, SE).

Thin tuff at the contact about 40 km to the northeast yielded an age of 1.4 Ga.

Dating

- -Uncalibrated radiocarbon age = 14 C yr BP or 14 C kyr BP. The '14' is a superscript and precedes the 'C'; 'BP' stands for before present = AD 1950.
- -Ages younger than AD 1950 (post-nuclear testing) require special reporting. *For additional information see the following reference:

Hau, Quan, Barbetti, Mike, and Rakowski, A.Z., 2013, Atmospheric radiocarbon for the period 1950-2010: Radiocarbon, v. 55, no. 4, p. 2059-2072.

-Calendar-year corrected radiocarbon ages or 'calibrated' ages = cal yr BP or cal kyr BP. There are significant differences between cal yr BP and ¹⁴C yr BP so it is essential to make it clear which you are reporting. You can use any number of calibration software programs CALIB or OXCAL, for example. Cite the program and version used to calibrate radiocarbon ages.

-For time, use these conventions:

Ga = billion years (giga-annum) Ma = million years (mega-annum) ka = 1000 years (kilo-annum) yr = year

Legal descriptions

-As a general guide, use lat/long to discuss particular sample sites, drill location, or outcrop. For latitude and longitude coordinates, do *not* add periods after 'lat' and 'long' but *do* after cardinal directions. Close the figures (no spaces between numbers and cardinal direction) and avoid breaking them up on separate lines of text. Only four significant figures are needed unless five significant figures denote a known level of accuracy.

...in the southern part of the quadrangle (lat 43.2558°N., long 114.1914°W.).

-Use the public land system (PLS) designation for larger areas or line features. There is no requirement to list both.

For section subdivisions, use:

```
...in the NW\frac{1}{4} sec. 5, T. 3 N., R. 24 E., is an exposure... ...in the NW\frac{1}{4}SE\frac{1}{4}SW\frac{1}{4} sec. 2, T. 3 N., R. 10 E., ... ...in the N\frac{1}{2} sec. 2, ... ...in the SE cor. sec. 2, ...
```

For multiple sections, townships, or ranges, use: (again, full points after cardinal direction)

```
...in secs. 2 and 3 (or secs. 2-3), T. 3 N., R. 10 E., ... ...Rs. 14, 15, and 16 W.....
```

Tables

-Table titles containing geologic units, as described in the map text, are italicized

Table 1: Chemistry of unit *Thc* tuff.

Table 1. Paleomagnetic data for unit *Qbg* in the Lamont quadrangle.

-Lat/long descriptions used in a table are marked as negative and positive (within table) -111.1520° (instead of long 111.1520°W.)

References Cited Guidelines

- Use the headings 'References' or 'References Cited' for the publications cited in the text. Use 'Selected References' if the list contains more works than those cited. Use 'Bibliography' if the list is a thorough compilation of the literature on the subject.

Authors and co-authors*

-List the last name of the main author first followed by a comma. Use initials of authors unless only the first name is given, at which point use full name. List all co-authors using the same format. If there are only two authors, insert comma between the names.

Stanford, L.R., and Freed, J.S., 2010....

Lewis, R.S., Welhan, J.A., Phillips, W.M.,...

Bonnichsen, Bill, Godchaux, M.M., Breckenridge, R.M.,...

-When there are multiple publications by the same author (with 2 or more co-authors), list the main authors name and all subsequent authors. When multiple entries exist for the main author, organize chronologically with the oldest publication listed first.

Formerly, authors were listed in alphabetical order based on the *last name of the next author in the publication, not chronological order*. Disregard this.

Lewis, R.S., Stanford, L.R., and Phillips, W.S., 2000

Lewis, R.S., Welhan, J.A., McFaddan, M.D., and Phillips, W.S., 2002

Lewis, R.S., Stanford, L.R., and Phillips, W.S., 2006

Titles

-All titles (books, conferences, theses, journal articles, etc.) including subtitles are written in full. [Abs.] is no longer used after the title of an abstract.

Ridenour, James, 1969, Depositional environments of the late Pleistocene American Falls Formation, southeastern Idaho: Idaho State University M.S. thesis, 82 p.

-For titles, capitalize initial letters of the first word, proper names, and the first word after a dash or colon; common words are lowercase.

Schmidt, D.L., 1961, Quaternary geology of the Bellevue area in Blaine and Camas counties, Idaho: University of Washington Ph.D. Dissertation, 135 p.

-If the research paper is from an edited volume, capitalize the initial letter of all words in the volume's title, except two- and three-letter prepositions.

Geologic Mapping in the Digital Era: Geological Society of America Abstracts with Programs, v. 4, no. 6, p.11-13.

-In citing a paper from a collected edition of papers, the title of the collection is capitalized to differentiate it as the book.

Hampel, A., 1993, Contrasting strike-slip motions on thrust and normal faults. Anthology of Great Geology Articles, p. 12-26.

Publisher

-The full name of the publisher or journal is given as it appears in the publication. No abbreviated format or acronym substitutes.

Journal of Petrology not Journ. Petro.

- -UPDATE: the publisher's location is unnecessary. Disregard previous instructions to include it.
- -The state of Idaho is always spelled out, never abbreviated as 'ID.'

Websites

-Cite websites by author of article, or website name if no author is listed, and use the following format:

Idaho Department of Water Resources, 2011, All permitted wells in GIS database. Available at: www.idwr.gov (accessed 13 February 2013).

NOTE: Using 'available online' is redundant; however, including an accessed date is crucial.

Misc.

- Include the ratio scale in the bibliographic reference of a map publication printed at original size. Do not include the scale if the map has been reduced or enlarged for printing. Do not add a space after the colon in the scale ratio.

Phillips, W.M., and Welhan, J.A., 2011, Geologic map of the Firth quadrangle, Bingham County, Idaho: Idaho Geological Survey Digital Web Map 123, scale 1:24,000.

Noteworthy

- -Exceptions for capitalizing proper names in their singular and plural forms of same word:
 - Snake River; Snake and Clearwater rivers
 - Latah County; Latah and Benewah counties

-Arabic numerals are generally substituted for Roman numerals unless the Roman numerals appear in a title or in a cited page reference, as 'Baker (1958, p. iii).'

Abbreviations

```
ed./eds. — editor/editors
comp./comps. — compiler/compilers
v. — volume
no. — number
2<sup>nd</sup> ed. — second edition
3<sup>rd</sup> ed. — third edition
4<sup>th</sup> ed. — fourth edition
pt. — part
pl./pls. — plate/plates
e.g.= example given; I like fruit (e.g. plums)
i.e.=in other words; I like fruit (i.e. I eat all fruits)
p. 78-84 = pagination range for pages 78-84.
p. X = single page with information or direct quote, such as Lewis, p. 157.
X p.= total number of pages, such as The Outcrop, 101 p.
```

-Remember to use millimeters, decimeters, and centimeters in descriptions, too. Another useful unit is tonne (metric ton = 1000 kilograms).

Examples of References

Abstracts

Bullard, F.M., and Rylander, D.L., 1970, Holocene volcanism in the Craters of the Moon National Monument and adjacent areas, south-central Idaho: Geological Society of America Abstracts with Programs, v. 2, no. 4, p. 273-274.

[NOTE: we don't use [abs.] after the title]

Article- in an edited book

Pierce, K.L., and Morgan, L.A., 1992, The track of the Yellowstone hotspot: Volcanism, faulting, and uplift, *in* Link, P.K., Kuntz, M.A., and Platt, L.B., eds., Regional Geology of Eastern Idaho and Western Wyoming: Geological Society of America Memoir 179, p. 1-53.

[NOTE: *in* is italicized.]

Article- in a journal

Hadley, D.M., Stewart, G.S., and Abel, J.E., 1976, Yellowstone — Seismic evidence for a chemical mantle plume: Science, v. 193, p. 1237-1239.

Book- 1 author; not in a series

Beckwith, J.A., 1987, Gem Minerals of Idaho: Caldwell, Idaho, Caxton Printers, Ltd., 129 p.

Book- 2 or more authors, not in a series

Strunk, W.F., and White, E.B., 1972, The Elements of Style (2nd ed.): New York, Macmillian Publishing Co., 78 p.

Book- Series

Myers, P.E., 1982, Geology of the Harpster area, Idaho County, Idaho: Idaho Bureau of Mines and Geology Bulletin 25, 46 p., 4 pls.

Book- Editors, compilers

Bates, R.L., and Jackson, J.A., eds., 1987, Glossary of geology (3rd ed.): Alexandria, Va., American Geological Institute, 788 p.

Author, date, title, *in* Link, P.K., Kuntz, M.A., and Platt, L.B., eds., 1992, Regional Geology of Eastern Idaho and Western Wyoming: Geological Society of America Memoir 179, 236 p.

Mitchell, V.E., Ott, M.H., Vance, R.E. and Bennett, E.H., comps., 1991, Mines and prospects of the Hailey quadrangle, Idaho (2nd ed.): Idaho Geological Survey Mines and Prospects Map Series, 75 p., 1 sheet, scale 1:250,000.

Digital Web Map

Lewis, R.S., Burmester, R.F., McFaddan, M.D., Kauffman, J.D., Doughty, P.T., Oakley, W.L., and Frost, T.P., 2007b, Geologic map of the Headquarters 30 x 60 quadrangle, Idaho: Idaho Geological Survey Digital Web Map 92, scale 1:100,000.

Dissertation and Thesis

Ridenour, James, 1969, Depositional environments of the late Pleistocene American Falls Formation, southeastern Idaho: Idaho State University M.S. thesis, 82 p.

[NOTE: A comma between the institution and the degree is not necessary.]

Geologic Map

Lewis, R.S., Bush, J.H., Burmester, R.F., Kauffman, J.D., Garwood, D.L., Meyers, P.E., and Othberg, K.L., 2005, Geologic map of the Potlatch 30 x 60 minute quadrangle, Idaho: Idaho Geological Survey Geologic Map 41, 30 p., scale 1:100,000.

Websites or Online Sources

Idaho Geological Survey, 2013, Oil and Gas Files. Available at: www.idahogeology.org/DrawOnePage.asp?PageID=228 (accessed 30 January 2017).

Shelley, Mary, 2012, Rhyolite as the Frankenstein of geology. Available at: www.terriblearticletitle.org (accessed 04 March 2011).