

Martin E. Ross Curriculum Vitae

Professor Emeritus of Geology
Northeastern University since 1978, Tenured 1984
Department of Marine & Environmental Sciences
14 Homes Hall
Northeastern University
Boston, MA 02115-5096
617.373.3263
m.ross@neu.edu

Education

Ph.D. 1978 University of Idaho, Moscow, Idaho
Dissertation: "Stratigraphy, Structure, and Petrology of Columbia River Basalt in a Portion of the Grande Ronde River-Blue Mountains area of Oregon and Washington"
M.S. 1970 Kent State University, Kent, Ohio
Thesis: Quantitative Petrography of Precambrian Mafic Dikes in the Bald Mountain Area, Bighorn Mountains, Wyoming.
B.S. 1968 Portland State University, Portland, Oregon.

Academic Positions

1984-present: Associate Professor, Department of Earth and Environmental Sciences, Northeastern University, Boston.
1978-1984: Assistant Professor, Department of Geology, Northeastern University, Boston.
1976 (Spring): Instructor, Department of Geology, University of Idaho, Moscow.
1970-1972: Instructor, Department of Earth Sciences, Northeastern University, Boston.
1970 (summer): Instructor, Department of Geology, Kent State University, Ohio.

Memberships in Learned Societies

Society of the Sigma XI, Member since 1970
Geological Society of America, Member since 1974
American Geophysical Union, Member since 1982
Massachusetts Geological Society, Member since inception 2015

Professional Licenses

Professional Geologist, State of Oregon (since 1978)
Engineering Geologist, State of Oregon (since 1978)

Grant History

1986: Basalt waste Isolation Program, Rockwell International, Hanford, WA, \$1125.
1985: Faculty fellowship, Northwest College and University Association for Sciences. \$6700.
1984: Sabbatical Leave Fellowship, Northwest College and University Association for

- Sciences. \$14,460.
- 1985: Department of Energy; support for XRF analyses, petrography, and Field work. \$20,000.
- 1982: Northeastern University Provost Grant: \$5000.
- 1980: Emergency Travel Grant (Mt. St. Helens), Northeastern University. \$800.
- 1979: Faculty Development Research Grant, Northeastern University. \$450
- 1975: Fellowship, Northwest College and University Association for Science. \$5000 stipend plus ~\$10,000 in related services.
- 1975: Society for Sigma Xi Grant-in-Aid of Research. \$100.
- 1974: Society for Sigma Xi Grant-in-Aid of Research. \$100.
- 1969: Society of Sigma Xi Grant-in-Aid of Research. \$150.

PUBLICATIONS

REFEREED CHAPTERS IN BOOKS AND MONOGRAPHS

- Hooper, P.R., Reidel, S.P., Camp, V.E., and Ross, M.E., 2015, The Columbia River Basalt Province: Stratigraphy, Petrogenesis, and Tectonic Setting, Cheney, E., editor, *The Geology of Washington and Beyond: from Laurentia to Cascadia*, University of Washington Press.
- Camp, V.E., Ross, M.E., Duncan, R.A., Jarboe, N.A., Coe, S.C., Hanan, B.B., and Johnson, J.A., 2013, The Steens Basalt: Earliest lavas of the Columbia River Basalt Group, in Reidel, S.P., Camp, V.E., Ross, M.E., Wolff, J.A., Martin, B.S., Tolan, T.L., and Wells, R.E., eds., *The Columbia River Flood Basalt Province: Geological Society of America Special Paper 497*, doi: 10.1130/2013.2497(04)
- Hooper, P.R., Camp, V.E., Reidel, S.P., and Ross, M.R., 2007, The origin of the Columbia River flood basalt province: plume versus nonplume models: in (Foulger, G.R. and Jurdy, D.M. (eds), *Plates, Plumes and Planetary Processes*, Geological Society of America Special Paper 430, p. 635-668.
- Ross, M. E., 1992, Petrology and tectonic significance of Mesozoic mafic dikes of the coastal New England igneous province, Massachusetts: in Puffer, J. H., and Ragland, P. D. (eds.), *Eastern North American Mesozoic Magmatism*, Geological Society of America, Special Paper 268, p. 63-74.
- Ross, M. E., 1990a, Mafic dikes of the Avalonian Boston terrane, Massachusetts: in Socci, A. D., Skehan, J. W., and Smith, G. W. (eds.), *Geology of the composite Avalon terrane of southern New England*, Geological Society of America, Special Paper 245, p. 133-153.
- Ross, 1990b, Geochemistry and tectonic significance of Precambrian(?) dykes of the Avalon terrane, Massachusetts: in Parker, A. J., Rickwood, P. C., and Tucker, D. H., (eds.), *Mafic Dykes and Emplacement Mechanisms: A.A., Balkema, Rotterdam*, p.

475-480.

Ross, M.E., 1989, Stratigraphic relationships of subaerial, invasive, and intracanyon flows of Saddle Mountains basalt in the Troy Basin, Oregon and Washington: in Reidel, S.P., Hooper, P.R. (eds.), Geological Society of America Special Paper 239, p. 131-142.

McHone, J. G., Ross, M.E., and Greenough, J.D., 1987, Mesozoic dyke swarms of eastern North America: in Halls, H.C., and Fahrig, W.H., eds., Mafic dyke swarms: Geological Association of Canada, Special Paper 33, p. 102-111.

REFEREED JOURNAL ARTICLES

VanTongeren, J. A., Ridge, J. C., Ross, M. E., Crowley, J. in preparation, 238 Ma age for early rift-related magmatism in the Coastal New England Province.

Reidel, S. P., Ross, M. E., Tolan, T. in preparation, Volcanic complex of the large volume Teepee Butte Member, Columbia River Basalt Group, Southeast Washington.

Reidel, S. P., Ross, M. E., Tolan, T., In preparation, Magma chamber recharge model to produce flows of the Teepee Butte unit of the Grande Ronde Member, Columbia River Basalt Group.

Reidel, S P., Ross, M. E., J. Kasbohm, 2023, The Nenana magnetite flow, Alaska Range, Alaska: Geoscience Canada, v. 50. P. 53-71. [Ol.org/10.12789/geocanj.2023.50.197](https://doi.org/10.12789/geocanj.2023.50.197).

Reidel, S. P., Ross, M. E., 2022, A rare sekaninaite occurrence in the Nenana Coal Basin, Alaska Range, Alaska: American Mineralogist, v. 108, 11 p., DOI: [10.2138/am-2022-8698](https://doi.org/10.2138/am-2022-8698).

Baker, L.L., Camp, V.E., Reidel, S.P., Martin, B.S., Ross, M.E., and Tolan, T.L., 2019, Alteration, mass analysis, and magmatic compositions of the Sentinel Bluffs Member, Columbia River flood basalt province: Comment: Geosphere, v. 15, p. 1436-1447, DOI: [10.1130/GES02047.1](https://doi.org/10.1130/GES02047.1).

Camp, V. E., Ross, M. E. , Duncan, R.A., and Kimbrough, D. L., 2017, Uplift, rupture, and rollback of the Farallon slab reflected in volcanic perturbations along the Yellowstone adakite hotspot track: Journal of Geophysical Research: Solid Earth, DOI: [10.1002/2017JB014517](https://doi.org/10.1002/2017JB014517), P. 1-33.

Camp, V. E., and M. E. Ross (2017), Major and trace-element analyses of Cenozoic volcanic rocks from southern Oregon, northern Nevada, and northeastern California, Earth Chem Library (<http://www.earthchem.org/library>), DOI:[10.1594/IEDA/100682](https://doi.org/10.1594/IEDA/100682).

Ross, M. E., 2010 An Early Triassic $^{40}\text{Ar}/^{39}\text{Ar}$ age for a camptonite dyke in Cambridge, Massachusetts, USA: *Atlantic Geology*, v. 46, p. 127-135.

Camp, V.E., and Ross, M.E., 2004, Mantle Dynamics and Genesis of Mafic Magmatism in the Intermontane Pacific Northwest, *Journal of Geophysical Research.*, v. 109, no. B8, B8204, DOI: 10.1029/2003JB2838 [printed 109(B8), 2004].

Camp, V. E., Ross, M. E., and Hanson, W. E., 2003, Genesis of flood basalts and Basin and Range volcanics from Steens Mountain to the Malheur River Gorge, Oregon: *Geological Society of America, Bulletin*, v. 115, p. 105-128.

Ross, Martin E., 1995, Exercises for Introductory Environmental Geology Courses: *Journal of Geological Education*, v. 43, p.352-356.

Hooper, P. R., Gillespie, B. A., and Ross, M. E., 1995, The Eckler Mountain Basalts and Associated Flows, Columbia River Basalt Group: *Canadian Journal of Earth Science*, v. 32, p. 410-423.

Ross, M. E., Massachusetts Mess, 1992, *International Landslide Research Group Newsletter*: v. 6, no.1.

Ross, M.E., and Morgan, M., 1987, Coastal geologic hazards and land-use planning in northwestern Oregon: *Environmental Geology and Water Sciences*, v. 8, p. 221-227.

Ross, M.E., 1986, Flow Differentiation, phenocryst alignment, and compositional trends within a dolerite dike at Rockport, Massachusetts: *Geological Society of America Bulletin*, v. 97. p.232-240.

Ross, M.E., 1983, Chemical and mineralogic variations within four dikes of the Columbia River Basalt Group, Southeastern Columbia Plateau: *Geological Society of America Bulletin*, v. 94, p. 1117-1126.

Ross, M.E. and Morgan, M., 1982, Coastal Geologic hazards and land-use planning in northwestern Oregon, *Environmental Geology and Water Science*, v. 8, no. 4, p. 221-227.

Ross, M.E. 1980, Tectonic controls of topographic development within Columbia River Basalt In a portion of the Grande Ronde River-Blue Mountains Region: *Oregon Geology*, V. 42, no.10, p. 167-171.

Ross, M.E., and Heimlich, R. A., 1972, Petrology of Precambrian mafic dikes from the Bald Mountain area, Bighorn Mountains Wyoming: *Geological Society of America*

Bulletin, v. 83, p.1117-1124.

Manzer, G.K., Heimlich, R.A., and Ross, M.E., 1971, Mineralogic variations across Precambrian mafic dikes in the southern Bighorn Mountains, Wyoming: *Compass*, v. 48, p. 75-83.

Ross, M. E., 1972, Precambrian quartzo-feldspathic gneiss from the Herman 1A well, Erie County, Ohio: *The Ohio Journal of Science*, 72, p. 105-109.

PUBLISHED MAPS

Camp, V.E. and Ross, M.E., 2003, Geologic maps of the Juntura, Selle Gap, Winnemucca Creek, Mosquito Mountain, Dunnean, McEwen Butte, Circle Bar, and Venator quadrangles (eastern Oregon), 1:24,000 scale. These are unpublished maps that have been compiled by the Department of Oregon Geology and Mineral Industries, as part of their eastern Oregon 1:100,000-scale map series.

Camp, V.E. and Ross, M.E., 2003, Geologic maps of the Juntura, Selle Gap, Winnemucca Creek, Mosquito Mountain, Dunnean, McEwen Butte, Circle Bar, and Venator quadrangles (eastern Oregon), 1:24,000 scale. These are unpublished maps that have been compiled by the Department of Oregon Geology and Mineral Industries, as part of their eastern Oregon 1:100,000-scale map series.

Swanson, D.A., Wright, T. L., Camp, V.E., Gardner, J.N., Helz, R.T., Price S.A., and Ross, M.E., 1979, Reconnaissance geologic map of the Columbia River Basalt Group, Pullman and Walla Walla quadrangles, southeast Washington and adjacent Idaho: U.S.G.S. Misc. Geol. Inv. Map I-1139, 1:250,000.

Ross, M.E., contributed to and referenced in Walker, G. W., 1977, Geologic map of Oregon east of the 121st meridian: U.S.G.S. Misc. Investigations Series Map I-902, 1:500,000.

Ross, M. E., contributed to and referenced in Walker, G.W., 1979, Reconnaissance geologic map of the Oregon part of the Grangeville Quadrangle, Baker, Union, Umatilla, and Wallowa Counties, Oregon: U.S.G.S. Misc. Investigations Map-I-1116.

REFEREED ABSTRACTS FOR NATIONAL AND INTERNATIONAL CONFERENCES

Yvette D. Kuiper, J. Christopher Hepburn, Daniel P. Murray, Martin E. Ross, David Martínez Poyatos, Noreen J. Evans, Christopher L. Kirkland, Bruno Viera Ribeiro, Katharina I. Pfaff, James L. Crowley, 2023, Testing the nature of the basement below the Ediacaran Boston Basin, eastern Massachusetts: geochronology of xenoliths in a Triassic camptonite dike, and of possibly related rocks: *Geological Society of America Abstracts with Programs, Annual Meeting*,

- Camp, V. E., Ross, M. E., Duncan, R. C., and Kimbrough, D. L., 2017, Farallon slab uplift and back-arc volcanism along the Yellowstone adakite hot spot track: Geol. Soc. America, Abs, Annual Meeting, Seattle.
- Camp, V. E., and Ross, M. E., 2009, Regional synthesis of Steens Basalt, Columbia River Basalt Group: Geological Society of America, Abstract with Programs, Annual Meeting, Portland, Oregon. p. 225.
- Ross, M. E., and Camp, V. E., 2007, Pillows formed by the injection of lava into the crystal mush of a thin Steens Basalt flow, Disaster Peak, Nevada: Geological Society of America, Abstracts with Programs, Annual Meeting, Denver.
- Camp, V. E., Hooper, P. R., and Ross, M. E., 2005, The calc-alkaline paradox of the inland Pacific Northwest, Goldschmidt Conference, Moscow, Idaho, p. A138 (invited).
- Camp, V. E., Orihashi, Yuji, and Ross, M. E., 2003, Radial volcanic migrations above continental hotspots: examples from Arabia and the Pacific Northwest: American Geophysical Union Fall Meeting, San Francisco, Abstract, v.54-2, p. 135.
- Kelly, P. J., and Ross, M. E., 2002, Contact relations of the Nahant gabbro and Weymouth Formation, Nahant, Massachusetts: Geological Society of America, Abstracts with Programs, Annual Meeting, Denver, Colorado.
- Ross, M. E., 2001, Crustal contamination of mafic dykes: Programme and Abstracts, Fourth International Dyke Conference, Ithala Game Reserve, KwaZulu-Natal, South Africa, p. 20.
- Camp, V. E., and Ross, M. E., 2000, Mapping the Steens-Columbia River Basalt Connection: Implications for the extent, volume, and magma supply rate of CRB volcanism, Geological Society of America Abstracts with Programs, Annual meeting, Reno, Vol. 32, No. 7.
- Ross, M. E., 1997, The Petrology of the Mafic Dike Swarm and Sills at East Point, Nahant, Massachusetts: American Geophysical Union Spring Meeting, Boston, Abstract, p. S377.
- Ross, Martin E., 1995, Crustal Contamination of Mafic Dyke Magmas: Program and Abstracts, Third International Dyke Conference, Jerusalem, Israel, p. 58.
- Ross, Martin E., 1994, A Group Project for Large Enrollment Geology Courses: Geological Society of America, Annual Meeting, Seattle, Abstracts with Programs, p. A-392.

- Ross, M. E., 1992, Mafic magmatism in the Avalon Terrane, coastal Massachusetts:(invited), Geological Association and Mineralogic Association of Canada Abstracts: Joint Annual Meeting, Wolfville, Nova Scotia,p. A96.
- Ross, M. E., 1992, Magma contamination within mafic dykes of the Avalon Terrane of Coastal Massachusetts: Geological and Mineralogic Associations of Canada, Abs.: Joint Annual Meeting, Wolfville, Nova Scotia, p. A96.
- Ross, M. E., 1990, Geochemistry and tectonic significance of Precambrian(?) mafic dykes of the Avalon terrane, Massachusetts: Geological Society of Australia Abstracts, Second International Dyke Conference, Adelaide, Australia.
- Ross, M.E., 1985, Mafic dike swarms of the Boston platform, eastern Massachusetts: International Conference on Mafic Dyke Swarms (extended abstract), University of Toronto, Ontario, Canada, p. 142-147.
- Ross, M.E., and Reidel,S.P., 1983, Dolerite and lamprophyre dikes of northeastern Massachusetts: Geological Society of America, Abstracts with Programs, Annual Meeting, Indianapolis, v. 15, no. 6, p. 674.
- Ross, M. E., and Morgan, M., 1982, Geologic input into coastal land use planning in northern Oregon: a national model?: Geological Society of America, Abstracts with Programs, Annual Meeting, New Orleans, v. 14, no. 7, p. 603.
- Reidel, S.P., Ross, M.E., and Long, P.E., 1978, Orthopyroxene fractionation in the Grande Ronde Basalt, Columbia River Group: EOS Transactions, American Geophysical Union, v. 59, no. 12, p. 1213.

REFEREED ABSTRACTS FOR REGIONAL CONFERENCES

- Ross, M. E., 2024, A new Late Pennsylvanian age for the Medford dike, Medford, Massachusetts: Geological Society of America, Abstracts with Programs, Northeast Section, V. 56, No. 1,doi:10.1130/abs/2024NE-396901.
- Eisner, E., Eby, N., Ross, M. E., 2021, Geochemistry and petrogenesis of Cape Ann, MA Mesozoic dikes: Geological Society of America, Abstracts with Programs, Northeast Section, v. 53.
- Camp, V. E., Ross, M.E., Duncan, R. C., and Kimbrough, D. L., 2014, Early manifestation of Yellowstone hotspot volcanism along a northeast-trending, 280-km long lithospheric discontinuity: Geological Society of America Abstracts with Program, Rocky Mountain-Cordilleran Sections Joint Meeting, v. 46, p. 93.
- Ross, M.E., 2013, The 1988 Malden, Massachusetts landslide: a case of multiple human

causes over a century in the making: Geological Society of America Abstracts with Programs, Northeast Section, vol 45, p. 71.

Ross, M. E., and Thompson, P.J., 2012, Geochemistry of sill and dikes of the Boston Harbor Islands and rheomorphic melting of the Cambridge argillite country rock: Geological Society of America Abstracts with Programs, Northeast Section, Hartford, CT, v. 44, no. 2. p. 102.

Camp, V.E., Ross, M.E., and Hooper, P.R., 2005 , The Great Volcanic Outburst Initiating the Yellowstone Hotspot , Geological Society of America, A84-2, p. 201 (invited).

Camp, V. E., and Ross, M. E., 2004, A two-stage spreading model for the Yellowstone mantle plume head: Geological Society of America Abstracts with Programs, Joint Meeting Rocky Mountain and Cordilleran Sections, v. 36, no. 4. p.97.

Ross, M. E., 2003, Intratelluric vs subaerial growth of phenocrysts in Columbia River Basalt Group lavas: Geological Society of America, Abstracts with Programs, Cordilleran Section, Seattle.

Camp, V. E. and Ross, M.E., 2003, Extending the CRB Province into southeastern Oregon: A reevaluation of flood-basalt volume, effusion rates, regional correlations, and volcanic migrations, Geological Society of America Abstracts with programs, Topical Session 134, v. 34, no. 7, p. A135.

Camp, V.E., and Ross, M.E., 2002, Regional geology of flood basalts and Basin-and-Range volcanic rocks north of Steens Mountain, Oregon, Geological Society of America Abstracts with Programs, p. A38.

Camp, V.E., Ross, M.E., and Hanson, W., 2000, Volcanic Stratigraphy of the middle and south forks of the Malheur River Gorge, eastern Oregon, Geological Society of America Abstracts with Programs, Cordilleran Section, v. 32, no. 6, p. A7.

Camp, V. E., and Ross, M. E., 1998, Petrochemical variation and regional correlation of the Steens Basalts and related rock north of Steens Mountain, Oregon: Geological Society of America Abstracts with Programs, Cordilleran Section, v. 30, p. 18.

Ross, M. E., 1987, Stratigraphic relationships of subaerial, intracanyon, and invasive flows of Saddle Mountains Basalts in the Troy, Basin, Oregon and Washington: Columbia River Basalt Symposium (invited paper), Geological Society of America Abstracts with Programs, v. 19, p. 445.

Hon, R., Smith, J. C., and Ross, M. E., 1987, Boston Basin: an aborted late Proterozoic rift: Boston Basin and adjacent Avalon terrane of southeastern New England, symposium (invited paper), Geological Society of America Abstracts with Programs, v. 19, p. 19.

- Ross, M. E., 1984, Flowage differentiation and flow alignment of plagioclase phenocrysts in an alkaline dolerite dike at Cape Ann, Massachusetts: Geological Society of America, Abstracts with Programs, v. 16, no. 1, p. 60.
- Ross, M.E., Knowles C. R., and Chamness, J.S., 1983, megacrysts, xenocrysts, and ultramafic xenoliths form a camptonite dike in Cambridge, Massachusetts: Geological Society of America Abstracts with Programs, v. 15, no. 3, p. 174.
- Hill, M.D., and Ross, M.E., 1983, Rb-Sr and Sm-Nd study of crustal xenoliths and megacrysts from a camptonite dike in Cambridge, Massachusetts: Abstracts with Programs (symposium), v. 15, p. 135.
- Ross, M.E., 1982, Mafic dikes of northeastern Massachusetts: Geological Society of America, Abstracts with Programs, v. 14, nos. 1 & 2, p. 78.
- Ross, M.E., 1981, Four petrographically distinct mafic dike types from eastern Massachusetts: Geological Society of America Abstracts with Programs, v. 13, no. 3, p. 172-173.
- Ross, M.E., and Reidel, S.P., 1981, Folding and faulting of basalts of the Columbia River Group along a portion of the Blue Mountains Uplift, Oregon and Washington: EOS Transactions, American Geophysical Union Symposium (Ellensburg, Washington), v. 63, no. 8, p. 173.
- Ross, M.E., 1980, Geologic hazards and land use planning along a portion of the northern Oregon coast: Geological Society of America, Abstracts with Programs, v. 12, no. 2, p. 79.
- Ross, M.E., 1980, Stratigraphy, structure, and petrology of Columbia River Basalt in a portion of the Grande Ronde River-Blue Mountains area of Oregon and Washington: extended abstract, Oregon Geology, v. 42, no. 1, p. 17-18.
- Ross, M.E., 1979, Evidence of partial melting and fractional crystallization of Columbia River Basalt magmas, Oregon and Washington: Geological Society of America, Abstracts with Programs, v. 11, no. 1, p. 51.
- Ross, M.E., 1979, Large scale strike-slip faulting of Columbia River Basalt in Northeast Oregon: Geological Society of America, Abstracts with Programs, v. 11, no. 1, p. 51.
- Ross, M.E., 1975, The structure of Yakima basalts in a portion of the Grande Ronde River region on northeastern Oregon and southeastern Washington: Geological Society of America, Abstracts with Programs, v. 7, no.5, p. 638.
- Ross, M.E. and Heimlich, R.A., 1973, Contact metamorphism of Precambrian quartz monzonite from the Bald Mountain area, Bighorn Mountains, Wyoming: Geologic

Society of America Abstracts with Programs, v. 5, no. 1, p. 98.

Ross, M.E., 1971, Quantitative petrography of Precambrian mafic dikes in the Bald Mountain area, Bighorn Mountains, Wyoming: Geologic Society of America Abstracts with Programs, v.3 no. 1, p. 51.

BOOK EDITOR

Reidel, S.P., Camp, V.E., Ross, M.E., Wolff, J.A., Martin, B., Tolan, T., and Wells, R., eds., 2013, The Columbia River Flood Basalt Province, Geological Society of America Special Paper 497, 440 p.

CHAPTERS IN PUBLISHED FIELD TRIP GUIDEBOOKS

Camp, V. E., Reidel, S. P., Ross, M. E., Brown, R. J., and Self, s. 2017, Field-Trip Guide to the Vents, Dikes, Stratigraphy, and Structure of the Columbia River Basalt Group, Eastern Oregon and Southeastern Washington: Scientific Investigations Report 2017–5022–N U.S. Department of the Interior U.S. Geological Survey, 103 p.

Ross, M.E., 2014, Dike Swarms of Cape Ann, Massachusetts, in Thompson, M.D. , ed., Guidebook to Field trips in Southeastern New England, 106th Annual New England Intercollegiate Field Conference, Wellesley College, p. B4-1 to B4-22.

Thompson, P.J., Kopera, J.P., Ross, M.E., Bailey, R. H., and Thompson, M. D., 2014, Bedrock Geology of Boston Harbor: Cambridge argillite and associated diabase sills and debris flows, in Thompson, M.D. , ed., Guidebook to Field trips in Southeastern New England, 106th Annual New England Intercollegiate Field Conference, Wellesley College, p. C1-1 to 1-32.

Ross, M. E., Dike Swarms of Cape Ann, Massachusetts, 2004, in Hanson, L.S., ed., Guidebook to Field Trips from Boston, MA to Saco Bay, ME: 96th Annual New England Intercollegiate Field Conference, Salem State College, p. C1-1 to C1-18.

Ross, M. E., 2001, Petrology and Field Relations at Pine Hill, Medford, Massachusetts: Geological Field Trip Guidebook, Geological Society of America Annual Meeting, Boston, Massachusetts.

Ross, M. E., and Bailey, R. H., 2001, Geology of East Point Nahant: Geological Field Trip Guidebook, Geological Society of America Annual Meeting, Boston, Massachusetts.

Bailey, R. H, and Ross, M.E., 1993, Geology of East Point, Nahant, a rocky New England shoreline: in Geological Field Trip Guidebook, New England, Geological Society of America Annual Meeting, Boston, Massachusetts p. Y1-Y24.

Ross, M.E., 1984, Mafic dikes from Boston to Cape Ann, in Hanson, L.S.(editor),
Geology of the Coastal Lowlands Boston, Massachusetts to Kennebunk, Maine: New
England Inter-collegiate Geologic Conference Guidebook, p.81-102.

Ross, M.E., 1981, Mafic dikes of northeastern Massachusetts: New England
Intercollegiate Geologic Conference Guidebook, p. 285-302.

ELECTRONIC PUBLICATIONS

Camp, V. E. and Ross, M. E., 2004, Radiating volcanic migrations: an example from the
Pacific Northwest: <http://www.mantleplumes.org> , 7 p.

Camp, V.E., and Ross, M. E., 2014, Mantle dynamics and genesis of mafic magmatism in
the intermontane Pacific Northwest LIP of the Month (November),
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INVITED TALK

Reidel, S.P., Ross, M.E., Tolan, T., 2024, The further adventures of the Tee Pee Butte volcano
and lava flows: Columbia Basin Geologic Society Meeting, Spokane, Washington.

OPEN FILE REPORTS

Ross, M. E., 2023, A possible parent magma for the gabbro, dikes, and sills at Nahant,
Massachusetts: Open File Report #8, Department of Marine and Environmental
Sciences, Northeastern University, Boston, Massachusetts, 33.p,
DOI: 10.13140/RG.2.2.13399.24483.

Ross, M. E., 2021, Major and trace element chemistry of Columbia River Basalt Group lavas in
the Troy, Oregon Area: Open File Report # 7, Department of Marine and Environmental
Sciences, Northeastern University, Boston Massachusetts, 32 p., DOI:
10.13140/RG.2.2.16540.21124.

Ross, M. E., 2021, Intradike Chemical Trends within Mafic Dikes: Open File Report # 6,
Department of Marine and Environmental Sciences, Northeastern University, Boston
Massachusetts, 25 p., DOI: 10.13140/RG.2.2.18794.64962.

Ross, M. E., A megacryst- and xenolith-rich Camptonite dike in Cambridge, Massachusetts: Open
File Report # 5, Department of Marine and Environmental Sciences, Northeastern University,

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Ross, M. E., 2020, The petrology and age of the Medford dolerite dike, Medford, Massachusetts: Open File Report # 3, Department of Marine and Environmental Sciences, Northeastern University, Boston Massachusetts. 56 p., DOI: 10.13140/RG.2.2.21253.99041.

Ross, M. E., 2020, The dike complex of Cape Ann, Massachusetts: Open File Report # 2, Department of Marine and Environmental Sciences, Northeastern University, Boston Massachusetts. 70 p., DOI: 10.13140/RG.2.2.35458.09921.

Ross, M. E., 2020, Igneous petrology of Nahant, Massachusetts: Open File Report # 1, Department of Marine and Environmental Sciences, Northeastern University, Boston Massachusetts. 25p., DOI: 10.13140/RG.2.2.23043.66084/1.

Ross, M.E., 2020, Igneous Petrology of Nahant, Massachusetts: Open File Report no. 1, Department of Marine and environmental Sciences, Northeastern University, Boston, MA, DOI: 10.13140/RG.2.2.23043.66084/1

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Ross, M. E., 2020, The igneous petrology of Nahant, Massachusetts: Open File Report No. 1, Department of Marine and Environmental Sciences, Northeastern University, 25 p. DOI: 10.13140/RG.2.2.23043.66084/1.

Ross, M. E., 2020 The dike complex of Cape Ann, Massachusetts: Open File Report No. 2, Department of Marine and Environmental Sciences, Northeastern University, 70 p. DOI: 10.13140/RG.2.2.35458.09921.

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