

ENHANCE YOUR EXPERIENCE IN THE FIELD BY CONSULTING THE FOLLOWING LIST OF PEER-REVIEWED LITERATURE:

Painting the big picture

Aspden, J.A. and Litherland, M. (1992). The geology and Mesozoic collisional history of the Cordillera Real, Ecuador. *Tectonophysics* 205: 187–204.

Gutscher, M.-A., Malavieille, J., Lallemand, S., Collot, J.-Y. (1999). Tectonic segmentation of the North Andean margin: impact of the Carnegie Ridge collision. *Earth and Planetary Science Letters* 168: 255–270.

Hall, M.L. and Mothes, P. (2008). Volcanic impediments in the progressive development of pre-Colombian civilizations in the Ecuadorian Andes. *Journal of Volcanology and Geothermal Research Special Volume on Archaeology and Volcanism* 177: XX-XX.

Hall, M.L., Samaniego, P., Le Pennec, J.L., Johnson, J.B. (2008). Ecuadorian Andes Volcanism: A review of Late Pliocene to present activity. *Journal of Volcanology and Geothermal Research* 176: 1-6.

Seismology and Geophysics

Guillier, B., Chatelain, J.L., Jaillard, E., Yepes, H., Poupinet, G., Fels, J.F. (2001). Seismological evidence on the geometry of the orogenic system in central-northern Ecuador (South-America). *Geophysical Research Letters* 28: 3749–3752.

Segovia, M. (2005). 14 years of instrumental seismicity in Ecuador; what have we seen and learned? In: *Bulletin of the International Institute of Seismology and Earthquake Engineering* 39: 1-11.

Yepes, H. (2003). Gallery of volcanic seismic signals recorded at Ecuadorian volcanoes as seen in short-period seismometers. In: *Seismological Research Letters* 74: 214.

Monitoring Efforts

Kumagai, H. (2007). Enhancing volcano-monitoring capabilities in Ecuador. In: *Eos, Transactions, American Geophysical Union*, June 05, 2007, Vol. 88, Issue 23, pp.245-246.

Segovia, M. (2005). 14 years of instrumental seismicity in Ecuador; what have we seen and learned? In: *Bulletin of the International Institute of Seismology and Earthquake Engineering* 39: 1-11.

Petrology and Geochemistry

Barragán, R., Geist, D., Hall, M., Larson, P., Kurz, M. (1998). Subduction controls on the

compositions of lavas from the Ecuadorian Andes. *Earth and Planetary Science Letters* 154:153–166.

Bourdon, E., Eissen, J.-P., Gutscher, M.-A., Monzier, M., Hall, M.L., Cotten, J. (2003). Magmatic response to early aseismic ridge subduction: the Ecuadorian margin case (South America). *Earth and Planetary Science Letters* 205: 123–138.

Bryant, J.A., Yogodzinski, G.M., Hall, M.L., Lewicki, J.L., Bailey, D.G. (2006). Geochemical constraints on the origin of volcanic rocks from the Andean Northern Volcanic Zone, Ecuador. *Journal of Petrology* doi:10.1093/petrology/eg1006.

**Literature specific to those volcanoes we have not provided field guides for:
Antisana, Illiniza, Atacazo–Ninahuilca, Sangay**

Bourdon, E., Eissen, J.-P., Monzier, M., Robin, C., Martin, H., Cotten, J., Hall, M.L., (2002). Adakite-like Lavas from Antisana Volcano (Ecuador): Evidence for slab melt metasomatism beneath the Andean Northern Volcanic Zone. *Journal of Petrology* 43: 199–217.

Hidalgo, S., Monzier, M., Martin, H., Chazot, G., Eissen, J.P., Cotten, J. (2007). Adakitic magmas in the Ecuadorian Volcanic Front: Petrogenesis of the Illiniza Volcanic Complex (Ecuador). *Journal of Volcanology and Geothermal Research* 159: 366–392.

Hidalgo, S., Monzier, M., Almeida, E., Chazot, G., Eissen, J.P., van der Plicht, J., Hall, M.L. (2008). Late Pleistocene and Holocene activity of Atacazo–Ninahuilca Volcanic Complex (Ecuador). *Journal of Volcanology and Geothermal Research* 176: 16–26.

Johnson, J.B., Lees, J.M. (2000). Plugs and chugs- Strombolian activity at Karymsky, Russia, and Sangay, Ecuador. *Journal of Volcanology and Geothermal Research* 101: 67-82.

Konstantinou, K.I., Lin, C.H. (2004). Nonlinear time series analysis of volcanic tremor events recorded at Sangay volcano, Ecuador. *Pure and Applied Geophysics* 161:145-163.

For Pleasure

This is a fantastic read: von Hagen, V.W. (1949). *South America Called Them: Explorations of the Great Naturalists*. R. Hale, London: 404 pp.

Whymper, E. (1892). *Travels amongst the great Andes of the Equator*: Peregrine Smith Books, Salt Lake City, Utah: 456 pp.

**A COMPREHENSIVE BODY OF LITERATURE PUBLISHED ON REGIONAL
ECUADORIAN VOLCANOLOGY:**

Aspden, J.A. and Litherland, M. (1992). The geology and Mesozoic collisional history of the Cordillera Real, Ecuador. *Tectonophysics* 205: 187–204.

Barberi, F., Coltelli, M., Ferrara, G., Innocenti, F., Navarro, J.M., Santacroce, R. (1988). Plio-Quaternary volcanism in Ecuador. *Geol. Mag.* 125: 1–14.

Barragán, R., Geist, D., Hall, M., Larson, P., Kurz, M. (1998). Subduction controls on the compositions of lavas from the Ecuadorian Andes. *Earth Planet. Sci. Lett.* 154:153–166.

Bourdon, E., Eissen, J.-P., Gutscher, M.-A., Monzier, M., Hall, M.L., Cotten, J. (2003). Magmatic response to early aseismic ridge subduction: the Ecuadorian margin case (South America). *Earth Planet. Sci. Lett.* 205: 123–138.

Bourdon, E., Samaniego, P., Monzier, M., Robin, C., Eissen, J.-P., Martin, H. (2004). Dubious case of slab melting in the Northern volcanic zone of the Andes: comments and reply. *Geology* e46–e47 (Online Forum).

Bryant, J.A., Yogodzinski, G.M., Hall, M.L., Lewicki, J.L., Bailey, D.G. (2006). Geochemical constraints on the origin of volcanic rocks from the Andean Northern Volcanic Zone, Ecuador. *J. Petrol.* doi:10.1093/petrology/eg1006.

Carn, S.A., Krueger, A.J., Arellano, S., Krotko, N.A., Yang, K. (2008). Daily monitoring of Ecuadorian volcanic degassing from space. *J. Volcanol. Geotherm. Res.* 176, 141–150.

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Collot, J.-Y., Marcaillou, B., Sage, F., Michaud, F., Agudelo, W., Charvis, P., Graindorge, D., Gutscher, M.-A., Spence, G. (2004). Are rupture zone limits of great subduction earthquakes controlled by upper plate structures? Evidence from multichannel seismic reflection data acquired across the northern Ecuador–southwest Colombia margin. *J. Geophys. Res.* 109: B11103. doi:10.1029/2004JB003060.

Ego, F., Sébrier, M., Lavenu, A., Yepes, H., Egues, A. (1996). Quaternary state of stress in the Northern Andes and the restraining bend model for the Ecuadorian Andes. *Tectonophysics* 259: 101–116.

Egüez, A., Alvarado, A., Yepes, H., Machette, M.N., Costa, C., Dart, R.L. (2003). Database and Map of Quaternary faults and folds of Ecuador and its offshore regions. *U.S. Geol. Surv. Open-File Rept.* 03–289.

- Feininger, T., Seguin, M.K. (1983). Simple Bouguer gravity anomaly field and the inferred crustal structure of continental Ecuador. *Geology* 11: 40–44.
- Garrison, J.M., Davidson, J.P. (2003). Dubious case for slab melting in the Northern volcanic zone of the Andes. *Geology* 31: 565–568.
- Guillier, B., Chatelain, J.L., Jaillard, E., Yepes, H., Poupinet, G., Fels, J.F. (2001). Seismological evidence on the geometry of the orogenic system in central-northern Ecuador (South-America). *Geophys. Res. Lett.* 28: 3749–3752.
- Gutscher, M.-A., Malavieille, J., Lallemand, S., Collot, J.-Y. (1999). Tectonic segmentation of the North Andean margin: impact of the Carnegie Ridge collision. *Earth Planet. Sci. Lett.* 168: 255–270.
- Hall, M.L. (1977). *El volcanismo en el Ecuador: Instituto Panamericano de Geografía e Historia, Quito, 120 pp.*
- Hall, M.L. and Wood, C.A. (1985). Volcano-tectonic segmentation of the northern Andes. *Geology* 13: 203–207.
- Hall, M.L. and Mothes, P. (1988). La actividad volcánica del Holoceno en el Ecuador y Colombia Austral: impedimento al desarrollo de las civilizaciones pasadas. In: Mothes, P.A. (Ed.), *Actividad Volcanica y pueblos Precolombinos en el Ecuador*. Abya-Yala, Quito, pp. 11-40.
- Hall, M.L. (1989). Advances in volcano hazard evaluation in Ecuador. *Bulletin- New Mexico Bureau of Mines and Mineral Resources*, pp. 118.
- Hall, M.L. and Beate, B. (1991). *El Volcanismo Plio-Cuaternario en los Andes del Ecuador*. El Paisaje Volcánico de la Sierra Ecuatoriana, Corp. Edit. Nac., Quito, pp. 5–18.
- Hall, M.L. and Mothes, P. (1999). La actividad volcánica del Holoceno en el Ecuador y Colombia Austral: impedimento al desarrollo de las civilizaciones pasadas. In: Mothes, P. (ed.), *Actividad volcánica y pueblos precolombinos en el Ecuador*. Abya-Yala Edition, Quito.
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- Hall, M.L., Samaniego, P., Le Pennec, J.L., Johnson, J.B. (2008). Ecuadorian Andes Volcanism: A review of Late Pliocene to present activity. *JVGR*, 176: 1-6.
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Jaillard, E., Ordoñez, M., Suarez, J., Toro, J., Iza, D., Lugo, W. (2004). Stratigraphy of the late Cretaceous–Paleogene deposits of the Cordillera Occidental of central Ecuador: geodynamic implications. *J. South Am. Earth Sci.* 17: 49–58.

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La Condamine, C.M. (1751- repub. 1986). *Diario del Viaje al Ecuador*, 221 pp.

Lonsdale, P. (2005). Creation of the Cocos and Nazca plates by fission of the Farallon plate. *Tectonophysics* 404: 237–264.

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Reynaud, C., Jaillard, E., Lapierre, H., Mamberti, M., Mascle, G. (1999). Oceanic plateau and island arcs of southwestern Ecuador: their place in the geodynamic evolution of northwestern South America. *Tectonophysics* 307: 235–254.

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Trenkamp, R., Kellog, J.N., Freymueller, J.T., Mora, H.P. (2002). Wide plate margin deformation, southern Central America and northwestern South America, CASA GPS observations. *Journal of South American Earth Sciences* 15: 157-171.

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White, S., Trenkamp, R., Kellogg, J. (2003). Recent crustal deformation and the earthquake cycle along the Ecuador-Colombia subduction zone. *Earth Planet. Sci. Lett.* 216: 231–242.

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Wolf, T. (1878). *Memoria sobre el Cotopaxi y su ultima erupción acaecida el 26 de junio de 1877*. Imprenta de El Comercio, Guayaquil: 48 pp.

Wolf, T. (1904). *Crónica de los fenómenos volcánicos y terremotos en el Ecuador*. Imprenta de la Universidad Central, Quito- Ecuador, 167 pp.

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