

**CATHY J. BUSBY- CV**  
**September 19, 2014**  
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**Publications posted at: [www.geol.ucsb.edu/faculty/busby](http://www.geol.ucsb.edu/faculty/busby)**

**PERSONAL**

Three daughters, born 1986 and 1989

**PROFESSIONAL PREPARATION:**

University of California at Berkeley, Geological Sciences, B.S. 1977  
Princeton University, Geological Sciences, Ph.D., 1983

**APPOINTMENTS:**

Full Professor, UC Santa Barbara, 1993-present (Level 6, 2010).  
Jackson School of Geoscience, University of Texas at Austin, 2010-2011.  
U.S. Geological Survey, summer 1997, 1998.  
Associate Professor, UCSB, 1988-1993.  
Assistant Professor, UCSB, 1982-1988.  
Research Associate, Smithsonian Institution, 1980-1989.  
Research Assistant, Geochemistry, Caltech, 1981-1982.  
Research Assistant, Geology, Princeton University, 1978-1982.  
Lab Assistant, K-Ar Laboratory, UC Berkeley, 1976-1977.

**THREE NEW NSF AWARDS, 2014:**

1. "Outstanding Exposure of Intact Unmetamorphosed Upper to Middle Crustal Oceanic Arc Section, Baja California: Analog to IODP Ultra-Deep Drilling Site, Izu-Bonin Arc", with Sue DeBari.
2. "REU Site: Collaborative Research: Field-based Research on the Gulf of California Rift Margin Basins, Baja California Sur, Mexico", with Tina Niemi
3. "Izu-Bonin rear arc: The Missing Half of the Subduction Factory: Co-Chief Scientist IODP Leg 350 (with Yoshi Tamura).

**AAPG DISTINGUISHED LECTURER, 2015:** Lectures at approximately 25 universities and societies.

**Co-Chief Scientist, IODP Expedition 350,** April and May 2014.

**Recent IODP Meetings (presenter):** Arc Middle Crust (Hawaii, 2012), Chikyu+10 (Tokyo, 2013), IODP Core Description Workshop (College Station) and Brazilian Equatorial Margin (Sao Paulo, 2014).

**Fellow of the Geological Society of America**

**Editorial Board, International Geology Review,** July 1, 2013.

**Editorial Board, Frontiers In Earth Science,** September 18, 2014.

**Convenor,** Penrose Conference "Origin and Uplift of the Sierra Nevada", August 2010.

**Textbook published:** Wiley-Blackwell: Recent Advances in Tectonics of Sedimentary Basins (with Antonio Azor), 2012.

**National Geographic "80's Greatest Tragedies"** episode, discussing volcanic eruptions (including Mount St. Helens): <http://natgeotv.com/uk/80s-greatest>

**Geological Society of America MGPV (Mineralogy Geochemistry Petrology Volcanology) Division Vice Chair, Chair and Past Chair (2009-2012);** Committee on Penrose Conferences and Field Forums, 2010-present.

**Advisory board member,** California Geological Survey.

**INVITED TALKS (past 4 years):** GSA Tectonic Crossroads (Ankara, Turkey), Texas Bureau of Economic Geology, University of Texas Institute of Geophysics, Jackson School Geology Department, Baylor University, Texas Christian University, University of Houston, University of Barcelona, University of California at Los Angeles, Cal Tech, CSU Bakersfield, Scripps Institution of Oceanography, Lamont Doherty Earth Observatory, UCLA Seismo-Tectonics seminar, UC Davis, University of Sao Paulo Institute of Oceanography.

## **TEACHING**

Summer Field Camp (Poleta folds, Long Valley, and Sierra Nevada), Field Methods, Volcanic Stratigraphy and Structure, Geological Catastrophes, Tectonics of Sedimentary Basins, Sedimentology and Stratigraphy, Clastic Depositional Environments, Mineralogy and Optical Mineralogy, Geology of Convergent Margins and Continental Rifts, Cordilleran Tectonics, Submarine Volcanism, Turbidite Sedimentology, Sequence Stratigraphy, California Geology, Geology of Mexico, Volcaniclastic Rocks, Physical Volcanology.

## **STUDENTS COMPLETED IN LAST TEN YEARS:**

Grant Yip, MS, 2003 (Exxon Mobil); Noah Garrison, MS, 2004 (Attorney in Environmental Protection); Hilario Camacho, PhD, 2004 (Signal Hill Petroleum); Fabrice Roulet, MS, 2006 (Amarada Hess Petroleum); Stephen DeOreo, MS, 2006; Carolyn Gorny, Senior Honors Thesis, 2008 (PhD student at Otago University); Megan Gambs, Senior Honors Thesis, 2009 (PhD student at University of Washington, Seattle); Jeanette Hagan PhD, 2010 (Exxon Mobil); Alice Koerner MS, 2010 (Chevron); Bryan Murray, PhD, 2014.

## **RECENT POSTDOCTORAL RESEARCHER:**

Graham Andrews (PhD, Leicester University): now Assistant Professor at CSU.

## **SHORT COURSES:**

*Tectonics of Sedimentary Basins* (with R.V. Ingersoll): A.A.P.G.-S.E.P.M. Annual Meeting, 1996; I. A. S. International Congress, Spain, 1998; A.A.P.G.-S.E.P.M. Annual Meeting, 1998; Second Latinamerican Sedimentological Congress, Argentina, 2000; NORFA North European PhD Training Course, Norway, 2000.

*State-of-the-Art Turbidites* (with Ben Kneller): Arco British, May 1996; BHP, May 1998.

*Submarine Volcanism*: Universidad Nacional Autónoma de México, March 2005.

*Tectonics and Turbidite Sedimentation*: Japanese Oil, Gas and Metals National Corporation, August 2006.

*Interpretation of Volcanic Arc Lithofacies*: Chilean Geological Survey, March 2011; National University of Columbia, 2013.

## **REFERENCES**

James Gill, Distinguished Professor Emeritus, UCSC: [gillord@ucsc.edu](mailto:gillord@ucsc.edu)  
John Dewey, Distinguished Professor Emeritus: [jfdewey@ucdavis.edu](mailto:jfdewey@ucdavis.edu)  
Ray Ingersoll, Professor, UCLA: [ringer@ess.ucla.edu](mailto:ringer@ess.ucla.edu)  
Peter Lipman, U.S. Geological Survey: [plipman@usgs.gov](mailto:plipman@usgs.gov)  
Eldridge Moores, Distinguished Professor Emeritus: [emmoores@ucdavis.edu](mailto:emmoores@ucdavis.edu)  
Jason Saleeby, Professor, California Institute of Technology: [jason@gps.caltech.edu](mailto:jason@gps.caltech.edu)  
Keith Putirka, Professor, CSU Fresno: [kputirka@csufresno.edu](mailto:kputirka@csufresno.edu)

### **EXTRAMURAL GRANTS IN PAST TEN YEARS:**

- IODP Consortium for Ocean Leadership Award, 2014: Izu-Bonin-Mariana Rear Arc: The missing half of the subduction factory (\$175,791).
- NSF grant, 2014 - 2018 (with Tina Niemi), "REU Site: Collaborative Research: Field-based Research on the Gulf of California Rift Margin Basins, Baja California Sur, Mexico" (\$504,000).
- NSF grant, 2014 – 2017 (with Sue DeBari), "Outstanding Exposure of Intact Unmetamorphosed Upper to Middle Crustal Oceanic Arc Section, Baja California: Analog to IODP Ultra-Deep Drilling Site, Izu-Bonin Arc" (\$273,638 to Busby, \$192,986 to DeBari).
- NSF grant, 2011-2013, "Steady State to Flare-Up Arc Magmatism In The Largest Cenozoic Silicic Igneous Province on Earth: The Sierra Madre Occidental, Mexico (\$220,000).
- Spanish Ministry of Education research grant, Spring 2010: "Recent Advances in Tectonics of Sedimentary Basins" (3,000 Euros).
- NSF supplemental grant, 2010 - 2013, "Geologic constraints on landscape evolution of the Sierra Nevada, California: Paleochannels, Magmatism and Structure" (\$30,000).
- UC Mexus grant (with Elena Centeno Garcia), 2009-2010, Transition from steady state to flareup arc magmatism in the largest Cenozoic silicic igneous and epithermal deposit on Earth: Sierra Madre Occidentale, Mexico (\$25,000).
- NSF grant, 2007 - 2010, "Geologic constraints on landscape evolution of the Sierra Nevada, California: Paleochannels, Magmatism and Structure" (\$225,000).
- NSF grant (with Keith Putirka, CSUF), 2007 - 2009, Collaborative Research: Origin and Significance of High-Potassium Volcanism: Insights from the Ancestral Cascades Arc, California (\$160,000 to Busby and \$160,000 to Putirka).
- GeoEarthScope geochronology grant, 2007 - 2010, "Geologic constraints on landscape evolution of the Sierra Nevada, California: Paleochannels, Magmatism and Structure" (Berkeley Geochronology Center for Busby's dating, \$30,000).
- USGS-EDMAP grant, 2009, "Landscape evolution of the Sierra Nevada, California: Paleochannels, magmatism and structure" (\$27,000).
- Spanish Ministry of Education research grant, July 2007 – 2008: "Neogene Tectonics and Sedimentation in the Betic Cordillera, Spain" (32,500 Euros).
- USGS EDMAP grant, 2006, Spatial Variation in Structural Styles along the Central Sierra Nevada Range Front (California): Clues from Volcanic Stratigraphy (\$15,000).
- NSF Grant (PI C. Busby and Co-PI P. Gans), 2002-2005, Miocene Volcanism in the Sierra Nevada, California: Stratigraphy, Volcanology, Geochronology and Structure (\$300,000), collaborative with Ian Skilling (University of Mississippi, \$100,000).
- UC Mexus grant, 2005-2006 (with Elena Centeno Garcia, UNAM, Mexico): Exotic vs. Fringing Arcs: Implications for the Growth of Continents (\$15,000 to Busby and \$10,000 to Centeno Garcia).
- USGS EDMAP grant, 2005, Geologic Mapping of the Central Sierran Frontal Fault System with Implications for the Tahoe Basin and the Carson City-Bridgeport Population Corridor (\$30,000).
- USGS EDMAP grant, 2003, Geologic mapping of Tertiary volcanic-volcaniclastic rocks in the northern Sierra Nevada: Paleotopographic and structural evolution (\$30,000).

#### **INDUSTRY RESEARCH AND EXPLORATION SUPPORT IN PAST FIVE YEARS:**

Mighty River Power, New Zealand, 2014: “3D Stratigraphic and Structural Model for the Puchuldiza Geothermal District, Chilean Andes”. \$23,000 in research support.  
GeoGlobal Energy LLC, 2009-2012, “Volcanic Stratigraphy and Structure of the Puchidiza Geothermal District, Chilean Andes”. \$280,000 in research support.  
Energy Source LLC, Salton Trough California, Hudson Ranch Geothermal Power Facility: Quaternary to Recent tephra and lava domes, 2010-2011. \$25,000 in research support.  
Hannon Armstrong LLC, 2010, “Volcanology of the Eastern Snake River Plain, Idaho”, (geothermal exploration). \$30,000 research support.  
Paramount Gold and Silver, 2008, “Volcanology and Structural Geology of the Guazapares Mining District, Sierra Madre Occidental, Mexico”. \$200,000 in research support.

#### **CURRENT AND RECENT PROFESSIONAL SERVICE:**

Past Chair (2011-2012), Chair (2010-2011) and First Vice Chair (2009 – 2010), Mineralogy Petrology Geochemistry and Volcanology Division of the Geological Society of America.

Penrose Conference Organizer (with Keith Putirka), “Origin and Uplift of the Sierra Nevada”, August 16 – 20, 2010 (included 2 days of formal field trips and 2 days of informal field trips, 2 days of them led by Busby).

California Geologic Mapping Advisory Committee, Sacramento (meets twice annually).

National Science and Engineering Council of Canada (NSERC), Earth Sciences, Research Awards Committee, 2007 – 2009 (reading and scoring of 80-120 proposals across a broad spectrum of Earth Science, and week-long panel).

#### **EDITORSHIPS**

Origin of the Sierra Nevada and Walker Lane, K. Putirka and C. Busby (eds.), **December 2011 and in progress, Special Issue of Geosphere** (26 papers published to date).

Recent Advances in Tectonics of Sedimentary Basins, 2012, C.J. Busby and A. Azor (eds.), 32 chapters, Wiley-Blackwell Publishing, 632 pp

Tectonics of Sedimentary Basins, 1995, C.J. Busby and R.V. Ingersoll (eds.), Blackwell Science, Oxford, 579 pp.

Editor (with M. Talbot and S. Burley), *Sedimentology*, 1990-1994 (International Association of Sedimentologists).

Jurassic Magmatism and Tectonics of the North American Cordillera, 1995, D. Miller and C. Busby (eds.), Geological Society of America Special Paper 299, 425 pp.

*Sedimentary Geology*, 1991, R. Cas and C. Busby-Spera, Special Issue on Volcaniclastic Sedimentation, V. 4, nos. 1-4.

#### **EXTRAMURAL EDUCATIONAL PROGRAMS (LAST TEN YEARS):**

SPANISH MINISTRY OF EDUCATION GRANT, 2007 – 2008, University of Granada, Spain, Geodynamics Department: lectures in graduate courses and department seminars, and participation in field research trips in the Betic Cordillera.

**AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS DISTINGUISHED LECTURER, 2001-2002:** six weeks of lectures in the U.S. and Canada.

### RECENT ORGANIZED FIELD TRIPS LED:

National Association of Geoscience Teachers, Fall 2006, Fall 2012.

Penrose Conference field trips (2 days formal trips plus 2 days informal trips), "Origin and Uplift of the Sierra Nevada", August, 2010.

Sierra Nevada Earthscope – Sierra Drip Continental Dynamics Meeting, Central Sierra, Fall 2006.

### BOOKS PUBLISHED:

Tectonics of Sedimentary Basins: Recent Advances, **2012**, C.J. Busby and A. Azor (eds.), 32 chapters, Wiley-Blackwell Publishing, 632 pp.

Tectonics of Sedimentary Basins, 1995, C.J. Busby and R.V. Ingersoll (eds.), Blackwell Science, Oxford, 579 pp.

### PUBLICATIONS (abstracts not listed)

Most papers are posted on my website at: [www.geol.ucsb.edu/faculty/busby](http://www.geol.ucsb.edu/faculty/busby)

*Students and postdoctoral researchers in italics*

<http://scholar.google.com/citations?user=AYD4j7sAAAAJ>

### 2015

Murray, Bryan, and Busby, Cathy, 2015, Epithermal mineralization controlled by synextensional magmatism in the Guazapares Mining District of the Sierra Madre Occidental silicic large igneous province, Mexico: *Journal of South American Earth Sciences*, v. 58, p. 1-18.

Tamura, Y., Busby, C.J., Blum, P., and the Expedition 350 Scientists, 2015, in press, Expedition 350 Summary: *Proceedings of the International Ocean Discovery Program* Volume 350, 66 pp. doi:10.14379/iodp.proc.350.101.201.

Tamura, Y., Busby, C.J., Blum, P., and the Expedition 350 Scientists, 2015, in press, Expedition 350 Methods: *Proceedings of the International Ocean Discovery Program* Volume 350, 41 pp. doi:10.14379/iodp.proc.350.101.2015

Tamura, Y., Busby, C.J., Blum, P., and the Expedition 350 Scientists, 2015, in press, Site U1436: *Proceedings of the International Ocean Discovery Program* Volume 350, 43 pp. doi:10.14379/iodp.proc.350.101.2015

Tamura, Y., Busby, C.J., Blum, P., and the Expedition 350 Scientists, 2015, in press, Site U1437: *Proceedings of the International Ocean Discovery Program* Volume 350, 142 pp. doi:10.14379/iodp.proc.350.101.2015

### 2014

Murray, Bryan, and Busby, Cathy, and de los Angeles Verde Ramírez, María, 2014, Extension and magmatism in the Cerocahui basin, northern Sierra Madre Occidental, western Chihuahua, Mexico: *International Geology Review*, p. 1-25 DOI 10.1080/00206814.2014.941022

Tamura, Y., Busby, C. and Blum, Y., and Expedition 350 Scientists, IODP Expedition 350 Preliminary Report, Izu-Bonin-Mariana Rear arc, the missing half of the subduction factory, 172 pp.

### 2013

Tamura, Y., Busby, C., and Blum, P., 2013, Izu-Bonin-Mariana Rear Arc: The missing half of the subduction factory. IODP Expedition 350 Scientific Prospectus, 64 pp. doi:10.2204/iodp.sp.2013.

- Busby, Cathy, Koerner, Alice, Melosh, Ben, Andrews, Graham and Hagan, Jeanette, 2013a, Sierra Crest graben-vent system: A Walker Lane pull apart within the ancestral Cascades arc: *Geosphere*, Special Issue (Eds K. Putirka and C. Busby) "Origin of the Sierra Nevada and Walker Lane", Geological Society of America, v. 9, no. 4, p. 736-780; doi: 10.1130/GES00670.1
- Busby, Cathy, Hagan, Jeanette, and Renne, Paul, 2013b, Initiation of Sierra Nevada range front - Walker Lane faulting at ~12 Ma in the ancestral Cascades arc: *Geosphere*, Special Issue *Geosphere* (Eds K. Putirka and C. Busby) "Origin of the Sierra Nevada and Walker Lane", Geological Society of America, v. 9, no. 5, 22 pp. doi: 10.1130/GES00927.1
- Murray, B., Busby, C.J., Ferrari, L., and Solari, L.A., 2013, Synvolcanic crustal extension during the mid-Cenozoic ignimbrite flare-up in the northern Sierra Madre Occidental, Mexico: Evidence from the Guazapares Mining District region. *Western Chihuahua: Geosphere*, Special Issue (Eds K. Putirka and C. Busby) "Origin of the Sierra Nevada and Walker Lane", Geological Society of America, v. 9, no. 5, 35 pp. doi:10.1130/GES00862.1
- Busby, Cathy, 2013, Birth of a plate boundary at ~12 Ma in the Ancestral Cascades arc, Walker Lane belt of California and Nevada: *Geosphere*, Special Issue (Eds K. Putirka and C. Busby) "Origin of the Sierra Nevada and Walker Lane", Geological Society of America, v. 9, no. 5, 14 pp., doi:10.1130/GES00928.1
- 2012**
- Busby, Cathy J., Koerner, Alice, Hagan, Jeanette, and Andrews, Graham, 2012, Sierra Crest graben: a Miocene Walker Lane Pull-apart in the Ancestral Cascades Arc at Sonora Pass, *in*, N. Hughes and Garry Hayes (eds), *Geological Excursions in the Sonora Pass Region of the Sierra Nevada, Far Western Section*, National Association of Geoscience Teachers field guide, Fall 2012 (<http://nagt-fws.org/>), p. 8-36.
- Busby, Cathy, 2012, Extensional and transtensional continental arc basins: Case studies from the southwestern United States: *in*, C. Busby and A. Azor (eds), *Tectonics of Sedimentary Basins: Recent Advances*, Wiley-Blackwell, p. 382-404.
- 2011**
- Putirka, K.D. and Busby, C.J., 2011, Introduction: Origin of the Sierra Nevada and Walker Lane: *In*, K. Putirka and C. Busby (eds), *Geosphere Special Issue: Origin of the Sierra Nevada and Walker Lane*; Geological Society of America, v. 7, p. 1269-1272.
- Centeno-Garcia, E., Busby, C., Busby, M., Talavera, O. and Gerhels, G., 2011, Evolution of the Cretaceous Guerrero terrane along the Mexican margin, from extensional arc through retroarc to continental arc settings: *Geological Society of America Bulletin*, v. 123, no. 9/10, p. 1776-1797, doi:10.1130/B30057.1
- 2010**
- Busby, C.J. and Putirka, K., Penrose Conference Report: Origin and Uplift of the Sierra Nevada, California, USA: *GSA Today*, Geological Society of America, v. 20, no. 12, p. 18-20.
- 2009**
- Busby, C.J. and Putirka, K., 2009, Miocene evolution of the western edge of the Nevadaplano in the central and northern Sierra Nevada: Paleocanyons, magmatism and structure: *in*, Gary Ernst, editor, *The Rise and Fall of the Nevadaplano*, *International Geology Reviews*, v. 51, nos. 7 – 8, p. 670-701.

- Gorny, C., Busby, C., Pluhar, C., Hagan, J., and Putirka, K., 2009, An in-depth look at distal Sierra Nevada paleochannel fill: drill cores through the Table Mountain latite near Knight's Ferry: in, Gary Ernst, editor, *The Rise and Fall of the Nevadaplano*, International Geology Reviews, v. 51, nos. 9-11, p. 824-842.
- Pluhar, C., Deino, A., King, N., Busby, C., Hausback, B., Wright, T., and Fischer, C., 2009, Lithostratigraphy, magnetostratigraphy, geochronology and radiometric dating of the Stanislaus Group, CA, and age of the Little Walker Caldera: in, Gary Ernst, editor, *The Rise and Fall of the Nevadaplano*, International Geology Reviews, v. 51, nos. 9-11, p. 873-899.
- Hagan, J., Busby, C., Renne, P., and Putirka, K., 2009, Cenozoic evolution of paleochannels, Ancestral Cascades magmas, and range-front faults in the Kirkwood - Carson Pass - Markleeville region (Central Sierra Nevada): in, Gary Ernst, editor, *The Rise and Fall of the Nevadaplano*, International Geology Reviews, v. 51, nos. 9-11, p. 777-823.
- Koerner, A., Busby, C., Putirka, K., and Pluhar, C., 2009, New evidence for alternating effusive and explosive eruptions from the type section of the Stanislaus Group in the "cataract" paleocanyon, central Sierra Nevada (CA): in, Gary Ernst, editor, *The Rise and Fall of the Nevadaplano*, International Geology Reviews, v. 51, nos. 9-11, p. 962-985.

## 2008

- Busby, C., DeOreo, S., Skilling, I., Gans, P., and Hagan, J., 2008, Carson Pass-Kirkwood paleocanyon system: implications for the Tertiary evolution of the Sierra Nevada, California: *Geological Society of America Bulletin*, v. 120, no. 3/4, p. 274-299.
- Busby, C.J., Hagan, J., Putirka, K., Pluhar, C., Gans, P., Rood, D., DeOreo, S., Skilling, I., and Wagner, D., 2008, The ancestral Cascades arc: Implications for the development of the Sierran microplate and tectonic significance of high K<sub>2</sub>O volcanism: in, J. Wright and J. Shervais (eds), *Ophiolites, Arcs and Batholiths: Geological Society of America Special Paper 438*, p. 331-378.
- Garrison, N., Busby, C.J., Gans, P.B., Putirka, K. and Wagner, D.L., 2008, A mantle plume beneath California? The mid-Miocene Lovejoy flood basalt, northern California: in, J. Wright and J. Shervais (eds), *Ophiolites, Arcs and Batholiths: Geological Society of America Special Paper 438*, p. 551-572.
- Saleeby, J., Ducea, M.N., Busby, C., Nadin, E., and Whetmore, P.H., 2008, Chronology of pluton emplacement and regional deformation in the southern Sierra Nevada batholith, California: in, J. Wright and J. Shervais (eds), *Ophiolites, Arcs and Batholiths: Geological Society of America Special Paper 438*, p. 397 – 428.
- Busby, C.J., "Geology of the Sierra Madre Occidental, Mexico", Large Igneous Province of the Month, posted on the IAVCEI website:  
<http://www.largeigneousprovinces.org/08nov.html>

## 2007

- Busby, C.J. and Bassett, K., 2007, Volcanic facies architecture of an intra-arc strike-slip basin, Santa Rita Mountains, Arizona: *Bulletin of Volcanology*, v. 70, no. 1, p. 85 – 103.
- Putirka, K., and Busby, C.J., 2007, The tectonic significance of high K<sub>2</sub>O volcanism in the Sierra Nevada, California: *Geology*, V. 35, no. 10, p. 923 – 926.
- Purucker, M., Le, G., Sabaka, T., Slavin, J., Strangeway, R., and Busby, C., 2007, Magnetic field gradients from the ST-5 constellation: Improving magnetic and thermal models of the lithosphere: *Geophysical Research Letters*, v. 34, L24306, doi:10.1029/2007GL031739

## 2006

- Busby, C. J., *Fackler Adams, B.*, Mattinson, J., and *De Oreo, S.*, 2006, View of an intact oceanic arc, from surficial to mesozonal levels: Cretaceous Alisitos Arc, Baja California, Mexico: *Journal of Volcanology and Geothermal Research*, v. 149, p.1 - 46.
- Busby, C.J. and Wagner, D., 2006, Mapping of Cenozoic volcanic rocks in the central high Sierra: clues to understanding landscape evolution and range-front faulting: National Association of Geoscience Teachers, Guidebook, 60 pp.

## 2005

- Busby, C.J., 2005, Possible distinguishing characteristics of deepwater silicic volcanism: *Geology*, v. 33, no. 11, p. 845-848.
- Busby, C.J., *Bassett, K.*, Steiner, M.B. and *Riggs, N.R.*, 2005, Climatic and tectonic controls on Jurassic intra-arc basins related to northward drift of North America, *in*, T.H. Anderson, J.A. Nourse, J.W. McKee and M.B. Steiner, (eds), The Mojave-Sonora megashear hypothesis: Development, assessment, and alternatives: Geological Society of America Special Paper 393, p. 359-376.
- Bassett, K.* and Busby, C., 2005, Structure and tectonic setting of an intra-arc strike-slip basin (Bisbee Basin, Southern Arizona): *in*, T.H. Anderson, J.A. Nourse, J.W. McKee and M.B. Steiner, (eds), The Mojave-Sonora megashear hypothesis: Development, assessment, and alternatives: Geological Society of America Special Paper 393, p. 359-376.

## 2004

- Busby, C.J., 2004, Continental growth at convergent margins facing large ocean basins: a case study from Mesozoic Baja California, Mexico: *Tectonophysics*, v. 392, p. 241-277.
- Busby, C.J., Skilling, I., *Rood, D.*, *DeOreo, S.* and Gans, P., 2004, Cenozoic volcanology and structural geology of the Carson Pass – Sonora Pass areas, Central Sierra Nevada, California: Field Guide, Volcanological Society of Sacramento Annual Field Trip, July 21-25, 2004.

## 2003

- Busby, C.J., *Kessel, L.*, Schulz, K., Foose, M., and Slack, J., 2003, Volcanic setting of the Ordovician Bald Mountain Massive Sulfide Deposit, Northern Maine: *in*, W. Goodfellow, S.R. McCutcheon and J.M. Peter (eds.), Massive Sulfide Deposits of the Bathurst Mining Camp, New Brunswick and Northern Maine: Economic Geology Monograph 11, p. 219-244 plus 2 large plates in back pocket.
- Kessel, L.* and Busby, C.J., 2003, Analysis of VHMS-Hosting Ignimbrites Erupted at Bathyal Water Depths (Ordovician Bald Mountain Sequence, Northern Maine), *in*, J. White, J. Smellie and D. Clague (eds.), Explosive Subaqueous Volcanism: American Geophysical Union, Geophysical Monograph Series, v. 140, p. 372-392.
- Foose, M.F., Slack, J.F., Busby, C.J., Schulz, K.J. and Scully, M.V., 2003, Geologic and structural setting of the Bald Mountain volcanogenic massive sulfide deposits, northern Maine - CU-Zn-Au-Ag mineralization in a synvolcanic sea floor graben: *in*, W. Goodfellow, S.R. McCutcheon and J.M. Peter (eds.), Massive Sulfide Deposits of the Bathurst Mining Camp, New Brunswick and Northern Maine: Economic Geology Monograph 11, p. 497-512.

## 2002

- Busby, C.J., *Yip, G.*, *Blikra, L.*, and Renne, P., 2002, Pacific margin example of catastrophic sedimentation triggered by K/T bolide impact: *Geology*, v. 30, p. 687– 690.



- Busby, C.J., *Schermer, E.R.* and Mattinson, J.M., 2002, Extensional arc setting and ages of Middle Jurassic eolianites, Cowhole Mountains (Mojave Desert, CA): GSA Memoir 195 (A. Glazner, J.D. Walker and J.M. Bartley, eds), Geologic Evolution of the Mojave desert and Southwestern Basin and Range, p. 79 – 92.
- Camacho, H.*, Busby, C.J., and Kneller, B.C., 2002, A new depositional model for the classical turbidite locality at San Clemente State Beach, California: American Association of Petroleum Geologists Bulletin, v. 86, no. 9, p. 1543-156.
- Schermer, E.R.*, Busby, C.J. and Mattinson, J.M., 2002, Paleogeographic and tectonic implications of Jurassic sedimentary and volcanic sequences in the west-central Mojave desert; GSA Memoir 195, Mojave Desert (A. Glazner, J.D. Walker and J.M. Bartley, eds) p. 93 – 116.
- Critelli, S.*, Marsaglia, K., and Busby, C., 2002, Tectonic and sedimentary controls on the composition of backarc volcanoclastic rocks; Geological Society of America Bulletin, v. 114, no. 4, p. 515 – 527.
- 2000**
- Busby, C.J., 2000, Review of "Integrated Earth and Environmental Evolution of the Southwest United States": EOS, American Geophysical Union Newsletter.
- 1999**
- Busby, C.J., 1999, Field trip review of "Southern Etendeka volcanism, northwestern Namibia: I.A.V.C.E.I. (International Association of Volcanologists) Newsletter.
- 1998**
- Busby, C.J., *Smith, D.P.*, *Morris, W.R.* and *Adams, B.*, 1998, Evolutionary model for convergent margins facing large ocean basins: Mesozoic Baja California (Mexico): Geology, v. 26, no. 3, p. 227-230.
- Fackler-Adams, B.N.* and Busby, C.J., 1998, Structural and stratigraphic evolution of extensional oceanic arcs: Geology, v. 26, no. 8, p. 735-738.
- Kneller, B, Busby, C.J., and Cronin, B., 1998, Field guide to turbidites of the Annot Sandstone, Maritime Alps, France, and the Hecho Group, Central Pyrenees, Spain, 100 pp.
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