



UNIVERSITY
OF HAWAII
HILO



Hawai'i Tourism
Authority



Conference Theme

This meeting is planned as an international forum for specialists in every area concerned with natural hazards to discuss the impacts of volcanic activity on society. It is deliberately multidisciplinary in focus, with themes and sessions planned to bring together workers who share common interests but who historically have had only limited interactions with each other.

Cities on Volcanoes aim is to publicize and develop collaborative work in emergency management, urban and rural planning, education, volcanology, sociology, and psychology.

History

The two previous Cities on Volcanoes meetings have taken specialists in many fields into two cities built in or on volcanoes to consider, at first hand, the problems of hazard mitigation and preparedness in such settings. Cities on Volcanoes 1 was held in Rome and Naples, Italy, in the shadow of Mount Vesuvius. Cities on Volcanoes 2 was held in Auckland, New Zealand, amongst the young volcanic cones and crater clusters of the Auckland Volcanic Field.

Hilo and the state of Hawai'i also have a vigorous volcanic past and future. Parts of the city of Hilo are built on the 1881 Mauna Loa lava flow, and the 1984 flow reached within 7 km of the outskirts of the city. Other Hawaiian communities have been severely impacted by eruptions as recently as 1990, and still others have developed in zones of high risk from future eruptions. At the time of writing, the 1983-2002 eruption of Kīlauea volcano is continuing in spectacular fashion and Mauna Loa is showing signs of renewed unrest. If such activity takes place during the conference, delegates will have the possibility to enjoy firsthand experience at an erupting volcano and the measures employed for hazard mitigation in Hawai'i.

Organizing Committee and Subcommittees

- Bruce Houghton**, Geology & Geophysics, UH-Manoa, Convener
- Pat Arthur**, Civil Defense Agency, County of Hawaii
- Darcy Bevens**, Center for the Study of Active Volcanoes
- Steve Brantley**, U.S. Geological Survey, Hawaiian Volcano Observatory
- James Buika**, Pacific Disaster Center
- William Davis**, Civil Defense Agency, County of Hawaii
- Mike Garcia**, Geology & Geophysics, UH-Manoa
- Andy Harris**, Hawaii Institute of Geophysics and Planetology, UH-Manoa
- Ken Hon**, Geology, UH-Hilo
- James Kauahikaua**, U.S. Geological Survey, Hawaiian Volcano Observatory
- Mardie Lane**, Hawai'i Volcanoes National Park
- Jack Lockwood**, Geohazards Consultants International
- Dave Smith**, Hawaii Tribune-Herald
- Don Swanson**, U.S. Geological Survey, Hawaiian Volcano Observatory
- Edward Teixeira**, Hawaii State Civil Defense Division
- Don Thomas**, Center for the Study of Active Volcanoes
- Brian Yanagi**, Hawaii State Civil Defense Division

Subcommittee Chairs

- | | |
|--------------------------------|----------------------|
| Program | Mike Garcia |
| Field trips and workshops | Don Swanson |
| Publicity and media | Jack Lockwood |
| Registration and accommodation | Darcy Bevens |
| Finance | Andy Harris |

This conference was organized by the Conference Center of the University of Hawai'i-Hilo led by the Director, **Judith Fox-Goldstein**, and Conference Specialist, **Andrea Furuli**.



Upper left: Lava burning Wahaula Visitors Center; June 2, 1989. Above: Lava fountain and flow, Pu'u 'Ō'ō vent, Kīlauea Volcano; June 30, 1984. Photos by J. Griggs

Conference Information

Venue

University of Hawai'i-Hilo, 200 West Kāwili Street, Hilo, Hawai'i

Accommodations

All delegates are requested to make their own accommodation bookings. We have negotiated special conference rates and block bookings with the following hotels and with the University of Hawai'i-Hilo residence halls.

• Hilo Hawaiian Hotel

71 Banyan Drive
Hilo, Hawaii 96720
Tel: 1 (808) 935-9361
USA Toll Free: 1 (800) 367-5004
Fax: 1 (808) 969-6472
Website: <http://www.castleresorts.com>

Reservations can be made 7:00 a.m. – 7:00 p.m.
daily (Pacific Standard Time)

Standard Garden View Rm: \$80.00 + 11.42% tax
Deluxe Ocean View Rm: \$99.00 + 11.42% tax
Based on single or double occupancy.

• Hawai'i Naniloa Resort

93 Banyan Drive
Hilo, Hawaii 96720
Tel: 1 (808) 969-3333
USA Toll Free: 1 (800) 367-5360
Fax: 1 (808) 969-6622
Website: <http://www.naniloa.com>

Standard Room: \$65.00 + 11.42 % tax
Superior Room: \$71.50 + 11.42 % tax
Deluxe Room: \$84.00 + 11.42 % tax
Based on single or double occupancy.

• University of Hawai'i-Hilo Hale Kehau Dormitory

On-campus housing, at the University of Hawai'i-Hilo, is available for conference participants. Housing accommodations are based on four people per unit. Each unit (\$100) has 2 bedrooms with 2 single beds in each room. Each unit shares one bathroom. Fewer than four individuals may reserve full and half units for exclusive use.

Single beds: \$25 per night
Half unit: \$50 per night
Full unit: \$100 per night

Please reference the Campus Housing section on page 15.

Contact: University of Hawai'i-Hilo Conference Center for additional information on University housing accommodations.

Phone: 1 808 974-7555 Fax: 1 808 974-7684,
E-mail: afuruli@conference.uhh.hawaii.edu

Bed and Breakfast accommodation options are listed at the following web sites: <http://www.stayhawaii.com>

Accompanying Persons/Family & Guest Programs:

There are no set programs for accompanying guests; information about optional activities will be available during registration.

Badges

Please wear your conference badge at all sessions and during all conference activities including field trips.

Cancellations and Refunds

Any amendments or cancellations must be made in writing to the UH-Hilo Conference Center. Cancellations received in writing before May 31 will receive a full refund less a \$75 administration fee. There will be no refunds processed after May 31 (see page 14). For delegates withdrawing within six weeks of the conference, substitute delegates are welcome, but please notify the Conference Center of name changes.

Commercial Exhibitors

We encourage companies and organizations to exhibit products or services that relate to emergency management and science. For more information on trade and sponsorship opportunities please contact the Conference Center at (808) 974-7555.

Field Trips

Pre- and post-conference field trips are outlined in detail later in this circular. On Wednesday, July 16, delegates can optionally choose from a selection of three one-day field trips.

Registration

We strongly encourage delegates to complete electronic registration for the meeting. See the web site: <http://www.uhh.hawaii.edu/~cov3/>

However, you may also FAX or MAIL a registration form to the Conference Center (see fax number and address below). Registration forms are located on page 16 of this circular.

Fax number:
(808) 974-7684

Mailing address:
UHH Conference Center
COV 3
200 W. Kāwili Street
Hilo, HI 96720-4091



Night view of lava fountain, Pu'u'Ō'ō cone; June 29 1983.
Photo by T. Neal.

Important Dates:

January 15, 2003	Abstract deadline for posters and presentations
March 15, 2003	Conference registration deadlines: <ul style="list-style-type: none">• Field trip registration• Pre-conference workshops registration• Pre-conference field trip registration
July 14-18, 2003	Cities on Volcanoes 3 Conference
July 19-20, 2003	Post-conference field trip and workshops.

General Information about Hawai'i

Hawai'i's Weather

Information provided from: Hawaii Weather Today
(<http://hawaiiweathertoday.com/>)

The Big Island is a natural wonder. Visitors here will find everything from stony deserts, to tropical forests, to high alpine zones. The Big Island, in fact, offers an opportunity to experience 11 of the world's 13 climate zones. The island is still a work in progress with Kīlauea adding to and reshaping it every day; the volcano even has an effect on weather.

Because Hawaiian weather varies very little throughout the year, the weather you'll experience on the Big Island depends more on location than time of year. The wide variety of climates and the resulting range of temperatures and rainfall across the island are mid- to low 70's (23.9-26.1 C) during the winter months of November to April.

Hilo

"Often referred to as the "Bay City," or the "City of Rainbows," Hilo's reputation comes from its lush tropical environment and an abundance of rainfall. Historically, Hilo was the government and commercial trade center of the island and it served the flourishing sugar plantations - the main industry of early Hawai'i.

Today, as one travels the Hamakua coastline, the sugar cane fields have now been replaced with macadamia nut trees, papayas, bananas, and tropical flowers - all of which are part of Hawaii's diversified agricultural profile. Hilo is noted for its heart-shaped anthuriums and hundreds of varieties of orchids...don't miss the chance to stop by the "Farmer's Market" to view the splendor of the tropical flowers.

Hilo's quaint appeal still draws nostalgic attention and continues to be the "gathering place" for the east side of the island. Vintage wood framed and stucco buildings, many dating from the turn of the century, give way to a feeling of history that dates back to the early 1900s.

With the expansion of the University of Hawai'i-Hilo, this small college town hosts an international academic community of over 3,000 students from Hawai'i, the US mainland and throughout the Pacific."

[Text abridged from *Hawai'i the Big Island*- John Penisten]

Preliminary Program

July	Date	Activity
13	Sunday 12-6 pm 6:00 pm	Field trips & workshops Registration - Hilo Hawaiian Hotel Icebreaker at Hilo Hawaiian Hotel
14	Monday 7:30 am 8:30 am 9:00-10:00 10:15am 10:30-12:00 12:15 -1:45pm 2-4 pm 3:00 pm. 7:30 pm	Registration -University of Hawai'i-Hilo Welcome Plenary lectures Refreshments Plenary lectures Lunch Posters & exhibits Refreshments Kīlauea 1983-2002 eruption lecture
15	Tuesday 8:30-noon 10:00 am 12:15-1:45pm 2 to 4:30 pm 3 pm 7:30 pm	4 concurrent sessions Refreshments Lunch 4 concurrent sessions Refreshments, posters & exhibits movie/evening at flow front
16	Wednesday 7:30 pm	All-day field trip Tale of Two Eruptions
17	Thursday 8:30-noon 10:00 am 12:15 -1:45pm 2 to 4:30 pm 3:00 pm 6:30 pm	4 concurrent sessions Refreshments Lunch Posters & exhibits Refreshments Conference dinner - Hilo Hawaiian Hotel
18	Friday 8:30-10:00 am 10:15 am 10:45-12:00 12:15 to 1:15 pm 1:30 to 2:30 pm 2:45 pm 3:15 pm 4:15 pm	4 concurrent sessions Refreshments coffee/tea 4 concurrent panels Lunch Plenary lectures Refreshments coffee/tea/beer Plenary lectures Closing ceremony
19	Saturday	Post conference field trips & workshops
20	Sunday	Post conference workshop

Proposed Plenary Speakers

Steve Bailey, Director, Pierce County Department of
Emergency Management, Tacoma, WA

Title: Mount Rainier—Small event equals a public
relations nightmare

Franco Barberi, former Italian Secretary of State for
Coordination of Civil Protection

Topic: Living with volcanic hazards from Vesuvius

Sonia Calvari, Istituto Nazionale di Geofisica e

Vulcanologia, Italy

Title: Experience of hazard management during
recent eruptions at Mount Etna

Servando de la Cruz Reyna, CENAPRED, Ciudad

Universitaria, Mexico

Title: Megacities on volcanoes, a special problem

Phil Ganderton, Professor of Economics, University of
New Mexico, USA

Topic: Value of cost-benefit analysis to natural hazards

Minard (Pete) Hall, Instituto Geofisico, Escuela

Politecnica Nacional, Ecuador

Title: Crisis at Tungurahua volcano, Ecuador, 1999-
2002: scientific, public and official response

Claire Horwell, Department of Earth Sciences,

University of Bristol, United Kingdom

Title: Volcanic emissions and health hazards: past,
present and future research

Bruce Houghton, Macdonald Professor of Volcanology,
University of Hawai'i, USA

Title: Volcanic crises in the 21st century: the partnerships
between emergency managers and science

David Johnston, Hazards & Society Program Leader,

Institute of Geological & Nuclear Sciences, New Zealand

Title: Improving societies' preparedness for future
volcanic eruptions

Bill McGuire, Professor of Geohazards, Department of
Geological Sciences, University College London, UK

Title: Volcanic risk and insurance: progress and pitfalls

Stephen Meinhold, Professor of Political Science,

University of North Carolina, USA

Topic: Building partnerships between research and
emergency management

Dario Tedesco, Dipartimento Scienze Ambientali,

Seconda Universita' di Napoli, Italy

Title: The 2002 Nyiragongo eruption and its social impact

Proposed Symposia and Workshops

Emergency Management

1. Emergency management and public safety
2. Preparedness and reducing vulnerability to natural hazards
3. Communicating with the general public
4. Mitigation and response/evacuation planning for crises
5. Viewing, interpretation, and safety on volcanoes
6. Socioeconomic consequences of long-lived eruptions and prolonged recoveries
7. Public reaction to long-term precursors and slow awakening of volcanoes
8. Land use planning as a mitigation strategy

Hazards and Risks

9. Volcano and earthquake hazards
10. Other hazards related to eruptions
11. Current status of volcanoes and volcano monitoring
12. Early warning systems for volcanic eruptions
13. Health effects of long-term exposure to volcanic gas and ash
14. Quantifying volcano risk and insurance issues
15. Education

Science on volcanoes

16. New techniques in volcanic surveillance
17. Volcanic processes based on recent eruptions
18. Recovery and adaptation of flora and fauna to eruptions
19. Geothermal resources: opportunities for communities on volcanoes
20. General volcanology



Lava fountain and flow, Pu'u'Ō'ō cone; February 4, 1985.
Photo by J. Griggs

Abstract Preparation and Submission Instructions

General Instructions

Prepare abstracts in Microsoft Word – Single Spaced- 300 words!

All abstracts are to be submitted as e-mail attachments. Please READ AND FOLLOW CAREFULLY the instructions below and the example provided. Your abstract should be saved as a Word file. If you cannot submit your abstract electronically please contact the Conference Center at 1 (808) 974-7555 or e-mail Andrea at: afuruli@conference.uhh.hawaii.edu. Please note that the accuracy of the abstracts is the responsibility of the authors.

The abstracts should be fully justified, single-spaced, and without indents. The abstract should be contained within a single paragraph. Special characters and mathematical notation should be kept to a minimum to avoid translation problems. The organizing committee reserves the rights to edit without your consultation abstracts that arrive in the wrong format or that are too long.

Time and space will limit the number of oral presentations possible. The Program Committee will make every attempt to accommodate requests for oral presentations, but this cannot be guaranteed. Dedicated poster sessions are a prime focus at this meeting, and coffee breaks will be housed in the poster room. We encourage participants to make use of this mode of presentation.

Please note that all presenters must register for the meeting.



Measuring the surface temperature of a lava flow at Kīlauea. Photo by S. Rowland

Abstract Example

Please follow the example provided. Abstracts can be no longer than 300 words and titles no more than 15 words. LONGER ABSTRACTS WILL BE EDITED.

Example

The 1983-2003 eruption of Kīlauea Volcano, Hawai'i

Michael O. Garcia and Bruce F. Houghton, Department of Geology and Geophysics, University of Hawai'i, Honolulu, HI 96822, USA
Don Swanson, U.S. Geological Survey, Hawaiian Volcano Observatory, Hawai'i National Park, HI 96718, USA

This mock abstract is intended to give you an example of the type of abstract you can submit for Cities on Volcanoes 3. You should keep your abstract to less than 300 words. The abstracts should be fully justified, single-spaced and without indents. The abstract should be contained within a single paragraph. Special characters and mathematical notation should be kept to a minimum to avoid translation problems. The organizing committee reserves the rights to edit without your consultation abstracts that arrive in the wrong format or that are too long.

Keywords: Kīlauea , lava flow hazards

Contact information:

Name: Michael O. Garcia
Full mailing address: Department of Geology and Geophysics
University of Hawai'i
POST 617c, 1680 East-West Road
Honolulu, HI 96822, USA
Phone # +1 808 956 2561
Fax # +1 808 956 5512
Email address garcia@soest.hawaii.edu

Presentation preference: Poster

Preferred session: 9. Volcano and earthquake hazards

Second choice of session: 17. Volcanic processes based on recent eruptions

NOTE:

Title of presentation: keep it short—15 words or less; capitalize only where needed

Keywords: list four key words or less

Presentation preference: either Oral or Poster

Preferred session: Select from list on page 5.

Submission Instructions

1. Save file as a Word document (.doc)
2. E-mail your abstract file as an attachment to the University of Hawai'i-Hilo conference center: cov3@hawaii.edu
3. In the subject line of your email message please put the preferred session for the paper (chosen from the list on the next page). For example, "Session 5: Viewing, interpretation and safety on volcanoes."
4. Submit one abstract per e-mail message to allow us to number and track each abstract separately. Official receipt of your abstract will be by return e-mail. Please submit each abstract ONLY ONCE.

Field trips

1. Kīlauea Summit and Upper East Rift Zone July 13, 16, 19, 8:00 a.m.—6:00 p.m.

Leaders: Don Swanson, USGS Hawaiian Volcano Observatory; Mardie Lane, Hawai'i Volcanoes National Park.

Cost: \$60 per person

Includes: Transportation by vans, sack lunch, beverages, snacks, and guidebook.

Route: Hilo—Hawai'i Volcanoes National Park—Hawaiian Volcano Observatory—Halemaumau Crater—Chain of Craters as far as Kealakomo (or coast if activity warrants)—Kīlauea Iki—Thurston Lava Tube—Hilo.

Visit USGS Hawaiian Volcano Observatory in Hawai'i Volcanoes National Park. Observe Kīlauea Caldera and Halemaumau, home of Pele. Visit lava flows as young as 1982—and possibly much younger. See 10-ton blocks that were hurled from Halemaumau in 1924. Learn how the national park deals with volcanic crises. Tour Chain of Craters, cross gaping ground cracks, and get great coastal views from the top of the Hilina fault system. Visit the site of 600-m lava fountains in 1959. Walk through a 550-yr-old lava tube before returning to Hilo.

The summit of Kīlauea is at 1200 m elevation. It can be cool or warm (15–22 C), wet or dry, calm or blustery, sunny or cloudy—all in the same day. Come prepared. Most newcomers wear shorts, and many wish they hadn't. Sunscreen, a hat that doesn't blow away, and a windbreaker are reasonable musts. Air quality can be poor owing to volcanic gas; the trip will try to avoid seriously obnoxious conditions, but those with asthma should be careful. Light boots or solid sneakers are appropriate footwear.

2. Lower Puna July 13, 16, 8:00 a.m.—6:00 p.m.

Leaders: Ken Hon, University of Hawai'i-Hilo; Jim Kauahikaua, USGS Hawaiian Volcano Observatory.

Cost: \$60 per person

Includes: Transportation by vans, sack lunch, beverages, snacks, and guidebook.



Littoral explosion, Kīlauea Volcano: February 3, 1988. Photo by J. Griggs.

Route: Hilo—Lava Tree State Park—Geothermal Plant—Kapoho Village (site)—Sand Hills—Lighthouse—Kapoho Beach Lots—Kaimū—Kalapana—Kapa'ahu—1955 Steam Vents and flow—Pāhala—Hilo.

This trip visits lava flows and vents for the 1955, 1960, and Pu'u'Ō'ō-Kūpaianaha eruptions, emphasizing their impacts on residents. See tree molds in deep forest developed on a late 18th-century flow. We may visit excellent examples of littoral cones formed in 1840 by lava pouring into the sea. Visit a subdivision disappearing into the ocean because of ground subsidence and rising sea level. Walk on water (almost) across the lava flow that filled Kaimū Bay in 1990. Observe the flows that destroyed the villages of Kalapana and Kapa'ahu in 1986-91.

Temperature will be warm to hot (25–30 C). Shorts and T-shirts are recommended. Could rain, but it will remain warm. Sneakers or light boots are adequate footwear. Bring sunscreen and hat.

3. Kona Gold Coast via the Saddle July 16, 7:00 a.m.—7:00 p.m.

Leaders: Jim Kauahikaua and Frank Trusdell, USGS Hawaiian Volcano Observatory; Chris Gregg, University of Hawai'i-Mānoa.

Cost: \$75 per person

Includes: Transportation by vans, sack lunch, beverages, snacks, and guidebook.

Route: Hilo—Mauna Kea State Park in saddle between Mauna Loa and Mauna Kea (with stops along the way)—Saddle Road Jct.—Upper Road to Ka'ūpūlehu flow—Kailua-Kona—Natural Energy Plant—Waikoloa Village—Waimea—Hilo.

This trip will start in Hilo and go over the saddle between Mauna Loa and Mauna Kea on the way to the resort-studded west coast of the island before returning via the town of Waimea. On the way up the saddle, we will look briefly at three of the six lava flows that have threatened Hilo in the last 150 years. Once on the west coast, the trip will focus on three lava flows that reached the ocean in the last three centuries in an area called the "Gold Coast" because of its resort developments. These flows provide our best clue for what future lava flows may do and the best basis for plans to mitigate the effects of future volcanic emergencies. We will discuss the volcanologic tools that may help guide emergency resource deployment and that could be used for effective land-use planning.

The trip reaches a little above 2000 m elevation in the saddle between Mauna Loa and Mauna Kea before dropping down to sea level. Temperatures can be pleasant to downright chilly in the saddle (10–18 C) and hot in Kona (30 or more C). Will likely be dry in Kona, possibly wet in the saddle. Either place could be windy. Sneakers or light boots are adequate footwear. Bring sunscreen and hat.

Pre-Conference Thematic Workshops

A. New Techniques for Volcano Surveillance

Sunday, July 13, 8:30 a.m. - 3:00 p.m.

Conveners: Peter Cervelli, USGS, Hawaiian Volcano Observatory; Peter Mouginiis-Mark, University of Hawai'i-Mānoa; Mike Poland, USGS, Cascades Volcano Observatory.

Cost: \$35 per person (Includes lunch and refreshment)

Venue: Hilo Hawaiian Hotel

Maximum Attendance: 40 people

In this workshop we will discuss new developments in hardware and software for monitoring volcanoes. Among others, we will demonstrate VALVE (Volcano Analysis and Visualization Environment), a web-based system for plotting a very wide range of data types on a common map or time-base.

Beyond VALVE's visualization capabilities, the system also provides a variety of tools for time series analysis and source modeling. For example, a user could load several tilt and GPS time series and then model the event with an elastic point source or dislocation.

B. Outreach and Education

Sunday, July 13, 8:30 a.m.-3:00 p.m.

Conveners: Carolyn Driedger, USGS Cascades Volcano Observatory; Cheryl Gansecki, Volcano Video Productions and University of Hawai'i-Hilo

Cost: \$35 (includes Box lunch)

Venue: Hilo Hawaiian Hotel

Maximum Attendance: 50

This workshop addresses multiple aspects of outreach and education, ranging from emergency communication with

the public during volcanic crises to hazards education during non-eruptive times. Part one of the workshop will focus on communications-based lessons learned from workers in areas at risk from volcano hazards, including presentations by key speakers and discussion by participants. Part two will be devoted to sharing of outreach products and services. Participants are encouraged to bring educational materials for demonstration, display, and distribution at the workshop.

Post-Conference Thematic Workshop

Lava Flow Mitigation

Saturday & Sunday, July 19-20, 8:00 a.m.-12:00 p.m.
(field observation discussion- 1:00-5:00 p.m.)

Conveners: Ken Hon, University of Hawai'i-Hilo; Sonia Calvari, Istituto Nazionale di Geofisica e Vulcanologia, Catania, Italy; Bruce Butts, Hawai'i County Civil Defense

Cost: \$ 35 per person (includes both days)

Venue: Hilo Hawaiian Hotel

Maximum Number: 45

Please note: Workshop participants are required to attend both days.

This symposium addresses all aspects of hazard mitigation associated with lava flows—including land use planning, hazard mapping, public perceptions of risk and vulnerability, and engineering interventions. The workshop will focus on three very active volcanoes with high rates of lava flow production—Kīlauea and Mauna Loa, Hawai'i and Etna, Sicily. Mornings will be devoted to field observation and discussion, afternoons to presentations; July 19, pāhoehoe issues, Kalapana example; July 20, 'a'ā issues, Saddle Road example..



South flank of Kīlauea Volcano:December 28, 1987. Photo by J. Griggs

Workshop during Conference

(Included in cost of registration fee)

State of Hawaii's Lava Flow Mitigation (LFM) Plan

Facilitator: **Brian Yanagi**, Hawai'i State Civil Defense Division

This workshop will be held as a concurrent session. The purpose of the LFM Plan is to reduce the risk of loss to life and property from the hazard of lava flows on the Island of Hawaii. This risk continues to increase in proportion to population growth, particularly as some of the fastest-growing sectors in Hawaii are in high hazard lava areas. As direct and indirect costs of lava flow hazards continue to rise in proportion to this population growth, it becomes imperative that preparations, including a mitigation strategy, be formulated to reduce the amount of public, residential and commercial damage and economic losses. Protection of critical facilities and infrastructure such as hospitals, fire stations, schools, utility lifelines, major roadways, etc., is essential to the continued daily functioning of the community during and after an eruption. Furthermore, through effective implementation of mitigation actions, policy decision makers need to be made aware of the LFM Plan and other related initiatives.

Various government agencies involved with the creation of the plan will participate in the concurrent session..

Evening Program

(Included in conference registration fee.)

Ice Breaker/Opening Reception

Sunday, July 13, 6:00-7:00 p.m.

Venue: Hilo Hawaiian Hotel

Join us in a pre-conference gathering in the ballroom of the Hilo Hawaiian Hotel on Banyan Drive. Light reception and Hawaiian music!

Note: the Hilo Hawaiian Hotel is next door to the Naniloa Hotel, so no transportation between the two is required.

Kīlauea Eruption 1983-2003

Monday, July 14 and Friday July 18, 7:30-8:30 p.m.

Venue: UH-Hilo Theater

Christina Heliker from the USGS Hawaiian Volcano Observatory will present a graphic summary of the eruptive activity and impacts of the 20-year-old eruption of Kīlauea Volcano. An abbreviated presentation on July 18 will be open to the public.

A Tale of Two Eruptions

Wednesday, July 16, 7:00-9:00 p.m.

Venue: UH-Hilo Theater

Shigeo Aramaki (Nihon University, Tokyo, Japan) and **Simon Young** (former Chief Scientist, Montserrat Volcano

Observatory) will present two contrasting pictures of communities that have learned to co-exist with erupting volcanoes on their doorsteps. The volcanoes are Soufriere Hills, on the island of Montserrat in the Caribbean, and Usu located in Miyakejima, Japan. These relatively vigorous eruptions present a useful contrast to the situation for Hawai'i communities during the ongoing Kīlauea eruption and earlier eruptions.

Closing Conference Dinner

Thursday, July 17, 7:30 p.m..

Venue: Hilo Hawaiian Hotel.

(Optional meal available to delegates and guests.)

The conference dinner will be held in the Moku' Ola Ballroom on the ground floor of the Hilo Hawaiian Hotel.

Public Programs

Night at the Movies

Tuesday July 15, 7:00-9:00 p.m.

Venue: UH-Hilo Theater

Eruption film and video from Hawai'i presented in person by local artists, and from elsewhere as the opportunity arises. Will include the classic period-piece, "Eruption of Kīlauea, 1959-1960," with spectacular footage of the Kīlauea Iki-Kapoho eruption.

Kalapana Dreaming

Friday July 18, 7:00-9:00 p.m. (Remembering what was and accepting what is in a lava-inundated community.)

Venue: UH-Hilo Theater

When pāhoehoe flows through an area, it burns and buries, overruns and obliterates. When the flows stop, it is as if a giant eraser had wiped the slate clean—layers of lava leave few tangible reminders. That is why it is so important to hali'a aloha, to cherish the memories. Join island residents as they reminisce and share stories of how the fingers of lava from Kīlauea's eruption touched each of their lives. Christina Heliker from the USGS Hawaiian Volcano Observatory will set the scene with an abbreviated summary of the eruptive activity.



Measuring inflation at pāhoehoe lava flow. Photo by S. Rowland

Exhibit and Trade Display Opportunities

Deadline

The registration deadline for the exhibit is April 30, 2003, with discounts available for exhibit registration before January 15, 2003.

Exhibit hall

Exhibits will be situated on the University campus and available for viewing throughout the conference. Poster sessions and refreshment breaks will be held in the exhibit hall to attract delegate traffic to the exhibits area.

Exhibit space and cost

Exhibit space is limited and available on a first-come, first-served basis. Exhibit areas are 10 feet long and contain (1) 6-foot table and (2) chairs. Electrical outlets are available at additional charge. Display booth and premier exhibitor space fee includes 1 conference registration fee and all

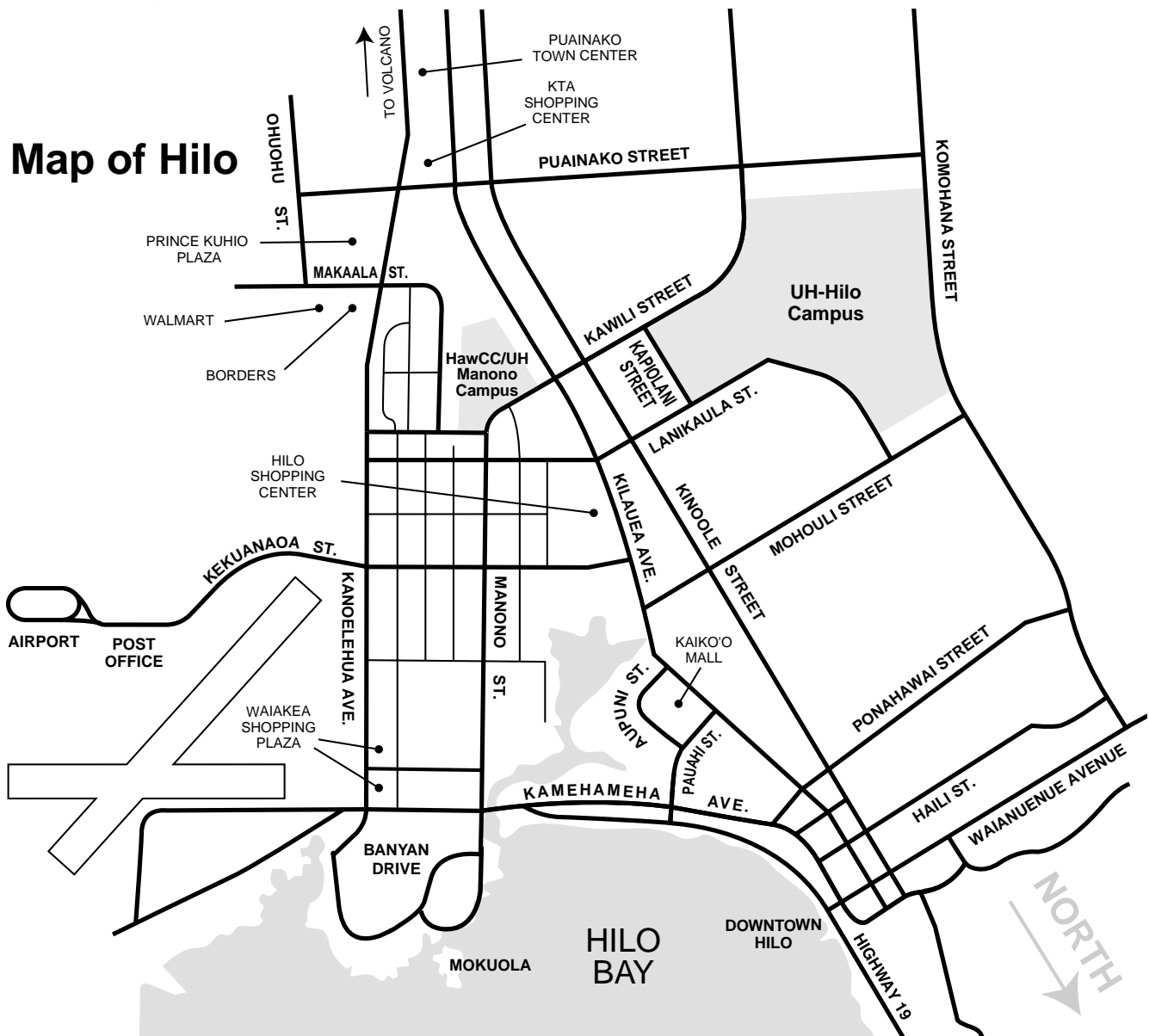
conference materials. A 10% early registration discount will be given for paid registrations received before January 15, 2003.

	Non-Profit	Other
Tabletop Space (No on-site representation)	\$ 200	\$ 300
Display booth (Representative present)	\$ 400	\$ 850
Premier exhibition space***	\$1,000	\$1,500

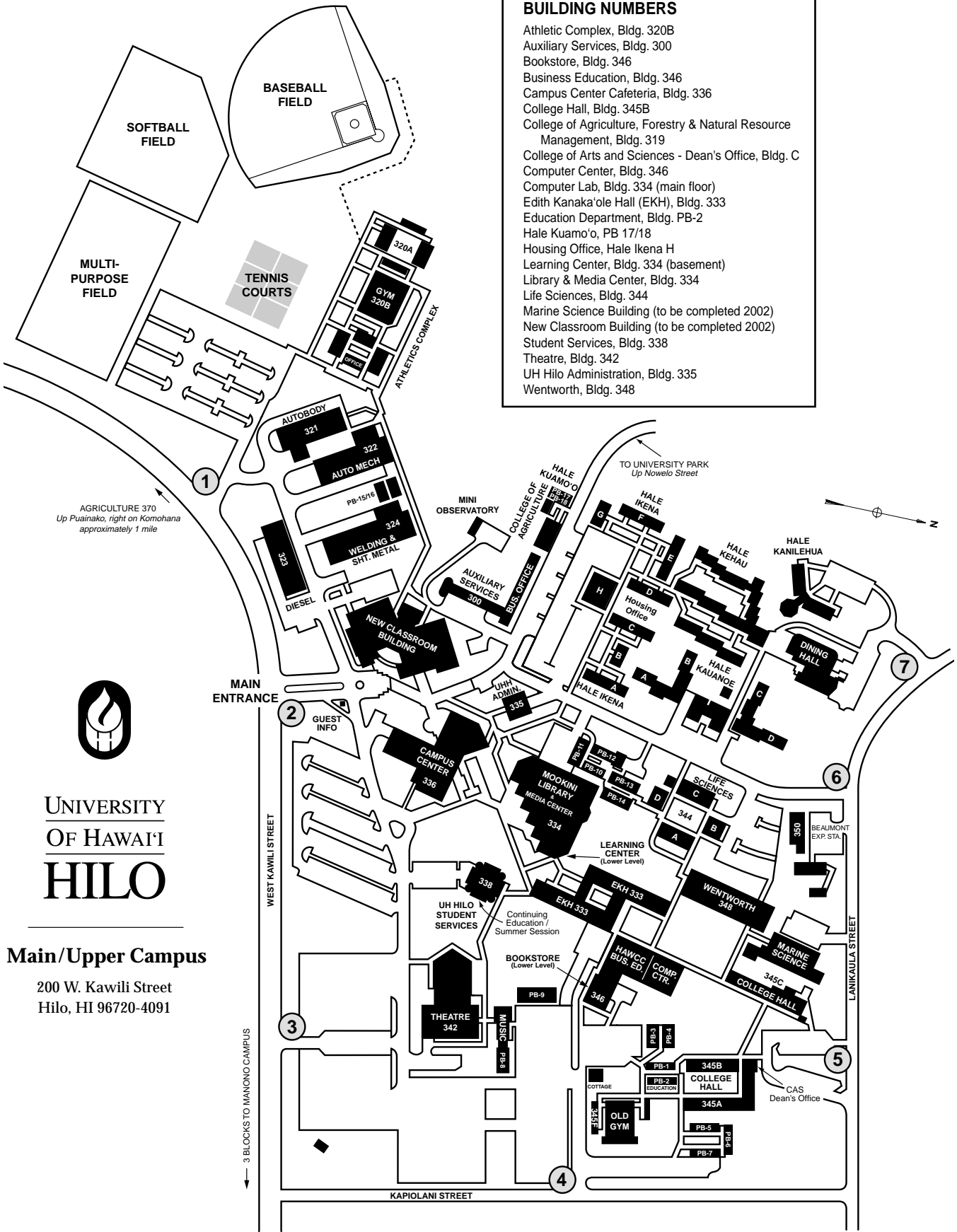
For additional information and Exhibitor Application and Agreement form, please see <http://www.uhh.hawaii.edu/~cov3> or call the University of Hawai'i-Hilo Conference Center at 1 (808) 974-7555.

***Large spaces with electrical and computer access, located in the new University Classroom Building, adjacent to Conference lecture halls and participant traffic.

Location Map- City of Hilo



Campus Map



- BUILDING NUMBERS**
- Athletic Complex, Bldg. 320B
 - Auxiliary Services, Bldg. 300
 - Bookstore, Bldg. 346
 - Business Education, Bldg. 346
 - Campus Center Cafeteria, Bldg. 336
 - College Hall, Bldg. 345B
 - College of Agriculture, Forestry & Natural Resource Management, Bldg. 319
 - College of Arts and Sciences - Dean's Office, Bldg. C
 - Computer Center, Bldg. 346
 - Computer Lab, Bldg. 334 (main floor)
 - Edith Kanaka'ole Hall (EKH), Bldg. 333
 - Education Department, Bldg. PB-2
 - Hale Kuamo'o, PB 17/18
 - Housing Office, Hale Ikena H
 - Learning Center, Bldg. 334 (basement)
 - Library & Media Center, Bldg. 334
 - Life Sciences, Bldg. 344
 - Marine Science Building (to be completed 2002)
 - New Classroom Building (to be completed 2002)
 - Student Services, Bldg. 338
 - Theatre, Bldg. 342
 - UH Hilo Administration, Bldg. 335
 - Wentworth, Bldg. 348

AGRICULTURE 370
Up Puainako, right on Komohana
approximately 1 mile

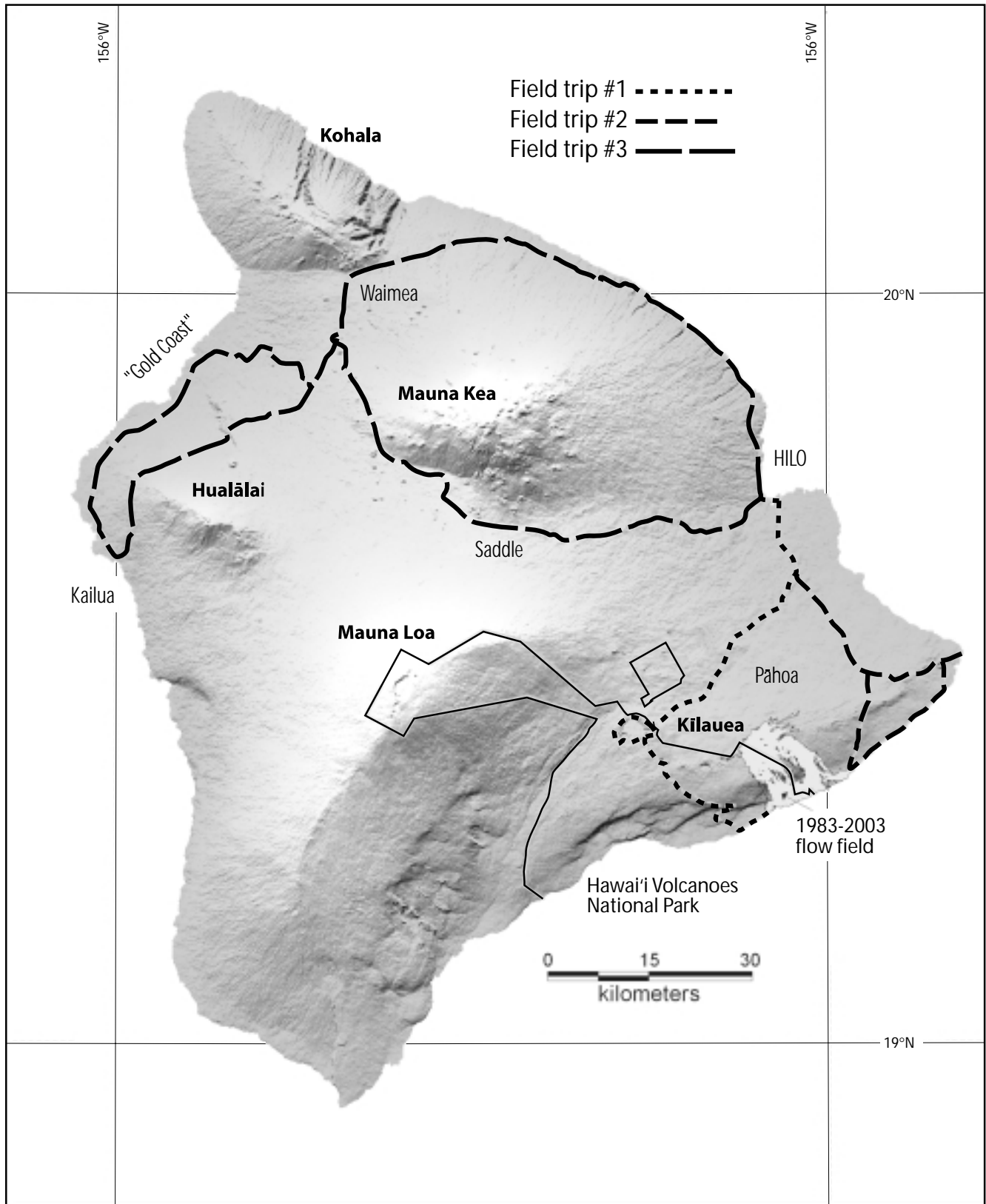


UNIVERSITY
OF HAWAII
HILO

Main/Upper Campus

200 W. Kawili Street
Hilo, HI 96720-4091

Field Trip Routes



Section III: Conference Registration

*Your registration fee includes the opening reception on July 13, refreshments, all meeting materials, program, abstract, entrance to sessions.

Registration postmarked on / before March 15, 2002 : \$375.00 \$ _____
Late registration postmarked after March 15, 2003: \$450.00 \$ _____
Section III Total Cost: \$ _____

Cancellations and Refunds:

No cancellations or refunds will be processed after May 31, 2003. Cancellations and requests for refunds must be received, in writing, prior to May 31. Refunds will be mailed after the conclusion of the conference. Please allow eight weeks for processing. An administrative fee of \$75.00 will be assessed for all cancellations.

Section IV: Optional and Guest Meals

Please select the following meals and/or meal plans. Payment for meals must be submitted and included with this registration form.

The opening reception for delegates is included in the conference registration fee. All other meals must be purchased for attendees and guests.

Optional Meals

Sunday, July 13

Opening reception, 5:30 – 7:30 pm – Hilo
Hawaiian Hotel *Included in
registration fee for delegates only.

Number _____ X \$30.00 = \$ _____

Friday, July 18

Closing dinner – Hilo Hawaiian Hotel

Number _____ X \$75.00 = \$ _____

Meal Plans

* Meals provided on the University Campus.

Meal Plan A – Breakfast Only

Breakfast (5) on: 7/14, 7/15, 7/16, 7/17, 7/18

(University of Hawaii at Hilo Campus)

Number _____ X \$40.00 = \$ _____

Meal Plan B – Breakfast and Lunch

Breakfast (5) on: 7/14, 7/15, 7/16, 7/17, 7/18

Lunch (4) on: 7/14, 7/15, 7/17, 7/18

(University of Hawaii at Hilo Campus)

Number _____ X \$80.00 = \$ _____

Meal Plan C – Lunch Only

Lunch (4) Only on: 7/14, 7/15, 7/17, 7/18

Number _____ X \$40.00 = \$ _____

(University of Hawaii at Hilo Campus)

Section IV Total Cost: \$ _____

Section V: Field Trips

Space is limited on a first-come, first-serve basis. Payment for fieldtrips MUST be submitted as a separate payment from Conference Registration.

Field Trip # 1 Kīlauea Summit and Upper East Rift Zone: 3 options

\$60 per person

#1A: July 13

#1B: July 16

#1C: July 19

Time: 8:00 a.m. – 6:00 p.m.

Includes: Lunch, beverages, snacks and handbook

Field Trip # 2 Lower Puna: 2 options

\$60 per person

#2A July 13

#2B July 16

Time: 8:00 a.m. to 6:00 p.m.

Includes: Lunch, beverages, snacks and handbook
Resource Guides: Jim Kauahikaua and Ken Hon

Field Trip #3 Kona Gold Coast Via The Saddle

\$75 per person

Date: July 16

Time: 7:00 a.m. - 7:00 p.m.

Includes: Lunch, beverages, snacks, and handbook

Field Trip # 1A Kīlauea Summit

July 13

Number _____ X \$60 = \$ _____

Please list all names:

1. _____
2. _____
3. _____

Field Trip # 1B Kilauea Summit
 July 16
 Number _____ X \$60.00 = \$ _____

Please list all names:

1. _____
2. _____
3. _____

Field Trip # 1C Kilauea Summit
 July 19
 Number _____ X \$60.00 = \$ _____

Please list all names:

1. _____
2. _____
3. _____

Field Trip # 2A Lower Puna
 July 13
 Number _____ X \$60.00 = \$ _____

Please list all names:

1. _____
2. _____
3. _____

Field Trip # 2B Lower Puna
 July 16
 Number _____ X \$60.00 = \$ _____

Please list all names:

1. _____
2. _____
3. _____

Field Trip # 3 Kona Gold Coast Via Saddle
 July 16
 Number _____ X \$75.00 = \$ _____

Please list all names:

1. _____
2. _____
3. _____

Section V Total Cost: \$ _____

Section VI: Pre- and Post-Conference Thematic Workshops

Pre-Conference Thematic Workshop
 July 13, Sunday, 2003

Please select one:

- (A) ___ New Techniques for Volcano Surveillance
 (B) ___ Outreach and Education
 \$35.00 \$ _____

Post-Conference Workshop:
 July 19 & 20, Saturday-Sunday
 Lava Flow Mitigation
 \$35.00 \$ _____

Please note: Participants for this workshop are required to attend both days.

Section VI: Total Cost \$ _____

Please remember... FIELD TRIPS AND WORKSHOPS REQUIRE A PAYMENT SEPARATE FROM CONFERENCE REGISTRATION FEE

Section VII: Campus Housing

Description

Accommodations are based on four people per unit. Each unit has 2 bedrooms with 2 single beds in each room. Each unit shares one (1) bathroom. Fewer than four individuals may reserve full and half units for exclusive use.

Price

(Occupancy based on 4 persons/unit. Single beds and family units available!)

Whole unit \$100 per night
 Half unit: \$50 per night
 Single beds \$25 per night

Contact

Contact University of Hawai'i-Hilo Conference Center for additional information on University housing accommodations. Phone: 1 808 974-7555 Fax: 1 808 974-7684 E-mail: afuruli@conference.uhh.hawaii.edu

Reservation Fee

Full Units ___ X \$100/night = \$ _____
 Half Unit ___ X \$50/night = \$ _____
 Single Beds ___ X \$25/night = \$ _____

Total Due: \$ _____

Cancellations

The Organizing Committee reserves the right to cancel any field trip that does not meet the minimum registration. Field trips are available on a first-come, first-served basis. If a trip is cancelled due to low enrollment, a full refund will be provided. Anyone canceling a field trip reservation after March 31 will be assessed a \$15.00 processing fee.

