

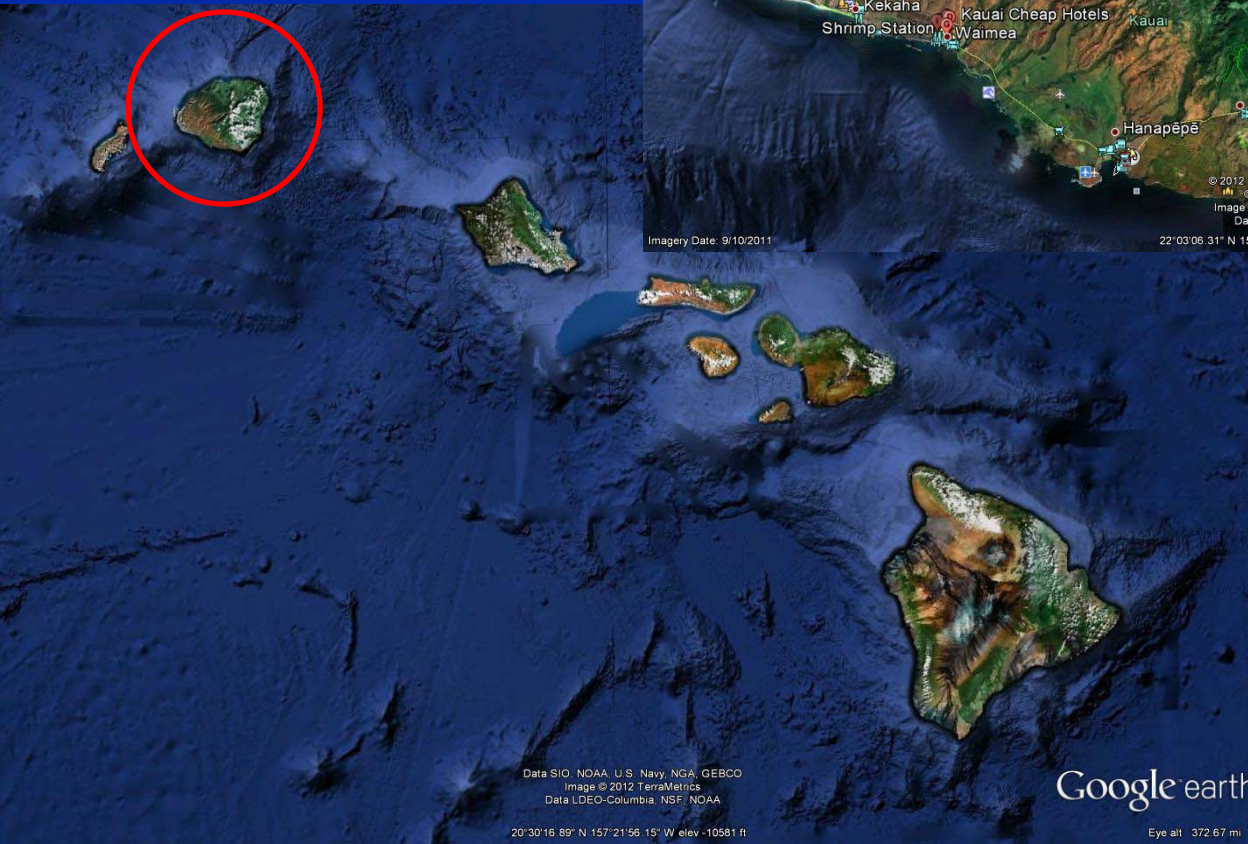
“Island Plant Systematics & Evolution”
in Hawaii
Intersession, 3-12 January, 2013

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Ohio University

Hawaii course: Basic details

- PBIO 4/5850 (“Global Studies in Plant Biology”)
- Seniors (and juniors?) get Tier III credit
- All activities on Kauai (oldest, most diverse)
- Hard-core systematics and evolution course
- UG prereqs: PBIO 248 (Trees & Shrubs) or PBIO 309 (Plant Systematics), or equivalent
- 16 students max
- Priority: seniors > juniors > sophomores

Kauai



Main Topics

- Families, genera, and characteristic and rare species in each community
- Evolutionary adaptations to oceanic island life
- Adaptive plant radiations
- Biogeography of the Hawaiian island flora
- Common invasive plants, their impact on native vegetation, and conservation efforts

Plant radiations

[Hawaiian honeycreeper]

'I'iwi or Scarlet Hawaiian Honeycreeper (*Vestiaria coccinea*)



Image by J. Jeffrey, U.S.

Violets (*Viola*)



8/12/2001

8/13/2001

Iliou (*Wilkesia gymnoxiphium*)



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Lobelioid
(*Cyanea*)



Preparation

- Students submit an application with DARS by 1 June; \$200 nonrefundable deposit required by end of first week of fall semester
- 7 mandatory 1-hour orientations during fall semester, will cover Hawaiian island geology and climate, overview of major plant families, genera and species, natural communities, conservation, details of packing
- Each student gives a 15 minute seminar on a family during the last 5 orientation sessions



8/13/20



8/8/2001

Course Schedule

- Fly as a group to Lihue on Thur., 1/3 (lodge 5 nights at NTBG McBryde Garden)
- Study lowland communities and flora Fri., 1/4-Sun., 1/6; exam 1 on Sun. afternoon; group supper
- Day off on Mon., 1/7
- Drive to Alakai Swamp Tue., 1/8 (lodge 3 nights at Camp Sloggett)
- Study highland flora Tue., 1/8-Thur., 1/10; exam 2 on Thur. afternoon
- Drive to Lihue, fly back to Ohio on Fri./Sat., 1/11-12



8/8/2001



8/15/2001



8/13/2001

Typical Class Day

- 8am--Everybody up and ready
- 8-9am—Breakfast
- 9-12--Mini-lecture on day's plant groups and activities, followed by field studies
- 12-1pm—Lunch
- 1-5pm--Field studies
- 5-6pm--Free time
- 6-7:30pm--Supper
- 7:30-8:30pm--Review

Lowland Kauai



National Tropical Botanical Garden (North Shore)

Nat Trop Bot Garden



Image © 2012 DigitalGlobe

Google earth

Imagery Date: 9/10/2011

22°13'04.39" N 159°34'31.74" W elev 263 ft

Eye alt 4292 ft

Upland Kauai



Camp
Sloggett

Alakai
Swamp

Waimea Canyon

Data LDEO-Columbia, NSF, NOAA
Image © 2012 DigitalGlobe
Data SOEST/UHM
Image © 2012 GeoEye

Google earth

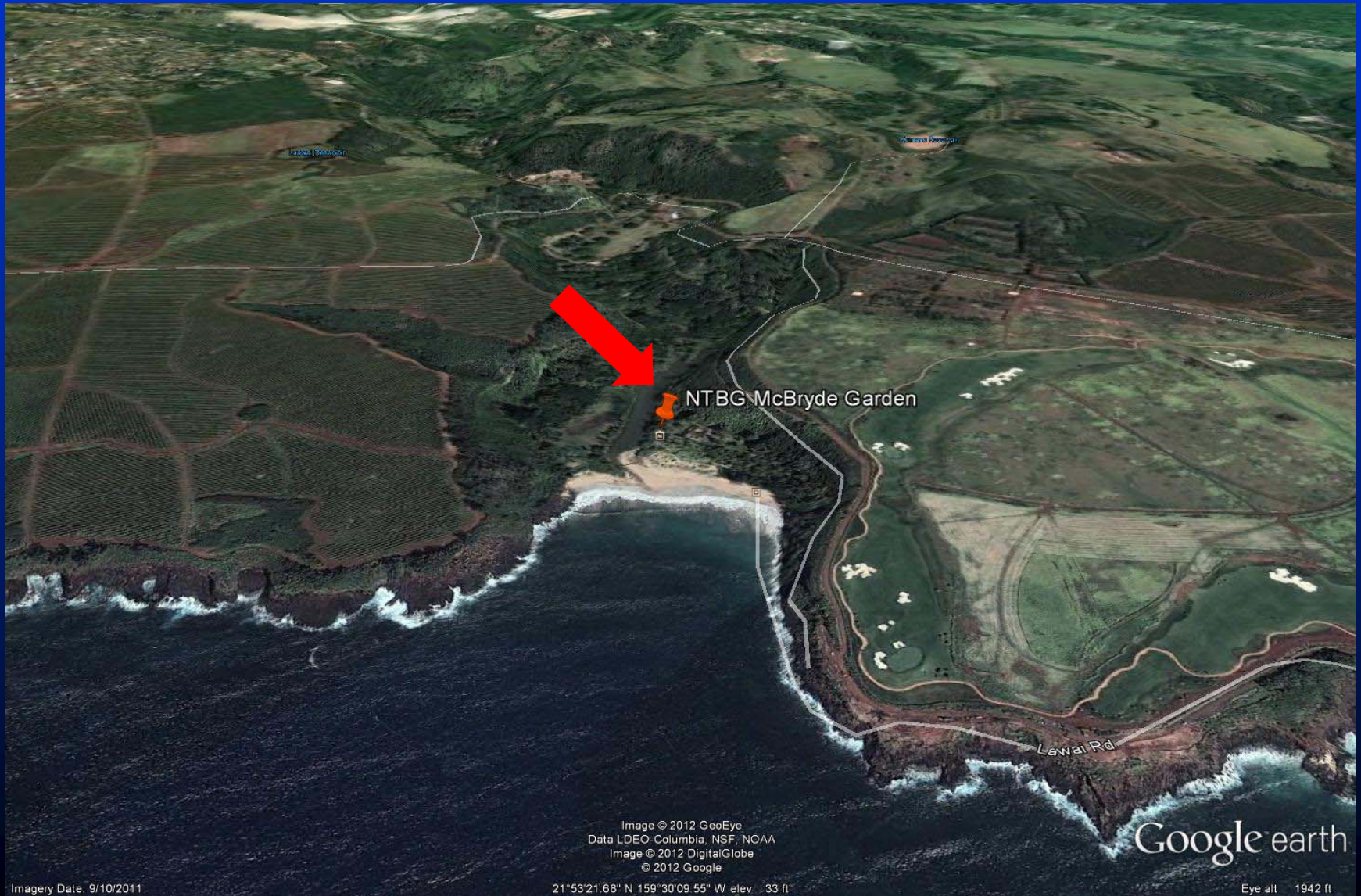
Climate and Dress

- Lowlands will be 70s-80s
- Highlands will be 50s-60s; Alakai Swamp may have spontaneous cold rain, fog!
- Bring range of clothing for hot sunny and cool/cold wet weather (December/January are “wet season” in Hawaii)
- Field gear: sturdy boots for some rugged hiking, hat, water bottle, sunblock, etc.

Accommodations and Meals

- Lowland housing in houses and a yurt, at NTBG McBryde Garden
- Alakai Swamp housing in small dorm-style rooms with multiple beds at Camp Sloggett
- Both provide bedding and linens
- We will purchase food at supermarkets and prepare “communal” meals
- I will cover \$20 per person for a group supper on Sunday evening, prior to day off

Lowland housing-McBryde Garden



Lowland housing— NTBG McBryde Garden

- 2 houses, Theobald sleeps 9 (using couches in living room), Papalina sleeps 6-7; houses have full kitchens
- “Weatherport” yurt (wooden floor, canvas walls, electricity) sleeps 10
- Embedded in garden, so will be a valuable teaching location and pleasant site

Theobald House



More pics of houses at NTBG

Papalina House



Inside Theobald House



Alakai Swamp-Camp Sloggett

- Dorm-style housing in "Lodge", "Bunkhouse"
- Kitchen in Lodge
- We supply sleeping bag, towel; they supply pillows, blankets, kitchen supplies



Course Administration

- You must be a full-time student in spring semester to participate
- You MUST keep 4 credits (undergrad) or 5 credits (grad) free in spring semester
- Summer Sessions will register you for PBIO 4850 or 5850 later in fall semester
- I will use your tuition to cover most of the course costs (everything except food)
- Final grade on spring semester transcript

Program Costs

Billed

- Program fee \$600
- Summer Sessions admin fee 100

Out of pocket

- Food money 160
- Snorkel gear rental (optional) 75
- Handlens 10

TOTAL

\$945

Packing

- ONE small or medium suitcase, duffle or backpack:
 - 2-3 sets of field clothes (long-sleeve shirts, long-sleeve pants)
 - 2-3 sets of casual clothes (t-shirts, shorts, 1 pr long pants for evening)
 - field boots, flipflops/sandals, socks & other undies
 - Swimsuit (plus snorkel gear if you bring it)
 - Toiletries (plus any meds), insect stuff, sunblock
 - Sunglasses, hat
 - Hoodie sweatshirt, or sweater, or lined windbreaker
 - Towel and washcloth
- Sleeping bag
- Daypack, water bottle, handlens, camera