**University of Hawaii Manoa**

Located in Honolulu, the University of Hawaii Manoa (UHM) has a lush and diverse tropical landscape. The 320-acre campus is home to more than 600 varieties of plants and trees, including many native and endangered species and one of the largest baobab trees in the United States. As stated on its website, the mission of UHM’s Office of Landscaping is “to develop the campus grounds into a botanical garden which students and faculty can use as a resource for teaching and learning.”

To help the UHM community learn about its landscaping, an interactive map of campus vegetation was created, in part by two students, that identifies all woody plants and trees in a graphic and interactive way. For each plant, the map provides information about the plant’s characteristics, geographic origin, uses, and rarity. The data come from an ongoing effort to map all plant species on campus using computer software tools including ArcGIS and Google Earth, as well as state-of-the-art surveying equipment. A 1996 brochure listing the huge variety of trees and shrubs on campus is also available online.

Due to their geographic isolation, the Hawaiian Islands have no native terrestrial mammals. But there are three important native bird species seen on campus: the 'aukū‘u or black-crowned night heron (*Nycticorax nycticorax hoactli*), which visits the campus pond and stream; the kolea or Pacific golden plover (*Pluvialis fulva*), which migrates to and from Alaska, and especially the *manu o kū‘ū* or fairy tern (*Gygis alba candida*). The *manu o kū‘ū* is an endangered species which nests in large campus trees. UH’s landscaping division has protocols to check for nesting terns before projects begin and will reschedule tree work if needed. The landscapers also grow plants to support native insects, such as *mānākī*, the preferred food of the endemic *pulelehua* or Kamehameha butterfly (*Vanessa tameamea*), and crownflower, which is favored by Hawai‘i’s monarch butterflies.

UHM’s landscape maps were first created by student employees of the landscaping department. Map updates, changes, and advancements continue to be made by students who research individual plants and historic campus buildings to provide other students, faculty, and staff with a valuable campus online resource. The plant maps are used in courses and for campus planning and construction projects, as well as for tree protection.

An innovative idea of the landscaping department is an adopt-a-landscape program where students, in collaboration with a faculty member, can manage a small portion of the campus landscape to develop small native plant gardens. This provides opportunities for students to gain hands-on experiences growing native plants, establishing gardens to support native insects, and practicing sustainability through gardening in an urban setting.

**University of Minnesota, Crookston**

The University of Minnesota, Crookston (UMC) is committed to conservation on campus; two of its best examples are the Nature Nook, which contains the Shaver Butterfly Garden, and the Youngquist Prairie Garden. The Shaver Garden was dedicated in 2007 and is named after June Shaver, a long-time supporter of the university. The Nature Nook and butterfly garden are home to monarch and painted lady butterflies, bumblebees, robins, and goldfinches. Plant species include purple coneflower, ironweed, milkweed, and various other prairie wildflowers and grasses, plus shrubs and trees. The Nature Nook is about a tenth of an acre and contains microcosms of four natural biomes. As observed by Professor Dan Svedarsky, “With that amount of diversity, it’s a stopover magnet for migrating birds like warblers and sparrows. From the second floor window of Owen Hall, the view into the tree canopy is like watching living TV.”

The Youngquist Prairie Garden, dedicated in 2006, is named in honor of a former campus administrator who promoted natural history research. The garden has sections representing three Minnesota prairie types: dry prairie, mesic prairie and wet prairie. It features native plants including coneflower, pasque