

bounded on the north by Puu Naio, to the south by the ocean, to the east by La Perouse Bay, and on the west by Ahihi Bay. Natural features within the unit include widely spread, remnant dry forest communities, and numerous rugged aa lava flows. Vegetation consists primarily of mixed-species dry forest communities composed of native and introduced plants, with smaller amounts of dry coastal shrubland (HHP 1993).

Along with Units 1, 3, and 4, this unit contains what is probably the largest extant Blackburn's sphinx moth population or metapopulation. This unit is essential to the species' conservation because it is occupied and contains the native larval host plant *Nothocestrum latifolium*, and other nectar-supplying plants for adult moths. In addition to providing essential habitat for the Maui metapopulation, areas within this unit provide ephemeral habitat for migrating Blackburn's sphinx moths.

Unit 3: Kanaio (Maui)

Unit 3 consists of approximately 2,421 ha (5,982 ac) on State and private land, encompassing portions of the leeward slope of Haleakala and adjacent portions of the upper southeast isthmus. The unit is bounded on the north by pasture lands, to the south by ocean, to the east by the Kanaio NAR boundary and Puu Hokukano, and on the west by the Kanaio Homesteads and Cape Hanamanioa. Natural features within the unit include widely spread, remnant dry forest communities, rugged aa lava flows, and numerous cindercones including the highly visible Puu Pimoe. Vegetation consists primarily of mixed-species mesic and dry forest communities composed of native and introduced plants, with smaller amounts of dry coastal shrubland (HHP 1993).

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Unit 4: Kahikinui (Maui)

Unit 4 consists of approximately 4,799 ha (11,859 ac) on State and private land, encompassing portions of the leeward slope of Haleakala. The unit is bounded on the northeast by the 1,525 m (5,000 ft) elevation contour of

Haleakala Volcano, to the south by the ocean, to the east by Poopoo Gulch, and on the west by Lualailua Hills. Natural features within the unit include widely spread, remnant dry forest communities, rocky coastline, numerous cindercones, and some of the most recent lava flows on Maui. Vegetation consists primarily of mixed-species mesic and dry forest communities composed of native and introduced plants, with smaller amounts of dry coastal shrubland (HHP 1993).

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Unit 5: Kanaha Pond (Maui)

Unit 5 consists of approximately 56 ha (139 ac) on State land, entirely comprised of the Kanaha Pond State Sanctuary on Maui. It is bounded on the south by the Kahului Airport, on the north by the ocean, on the east by coastline, and to the west by the town of Kahului. Natural features within the unit include Kanaha Pond and remnant coastal dune communities. Vegetation consists primarily of mixed-species, dry coastal shrub land communities composed of native and introduced plants, including nonnative larval host plants (HHP 2000).

Although devoid of naturally occurring *Nothocestrum* spp., the unit is essential to the species' conservation because it contains adult Blackburn's sphinx moth primary constituent elements, and recent observations of both larvae and adults have been documented within the sanctuary. Although this unit is lower in elevation than areas currently containing *Nothocestrum* plants, the persistent occurrence of Blackburn's sphinx moth within the Kanaha Pond State Sanctuary and other nearby areas indicates this site provides habitat for this area's moth population, and plays an important role in the species' population dynamics. Based upon an understanding of this species and other moth species' flight capabilities and migrational needs, we believe that designation of this area contributes to the available matrix of undeveloped habitat necessary as refugia for Blackburn's sphinx moths migrating to other areas of existing suitable host plant habitat on Maui (A.

Medeiros, pers. comm. 1998; S. Montgomery, pers. comm. 2001; McIntyre and Barrett 1992; Roderick and Gillespie 1997; Van Gelder and Conant 1998).

Unit 6: Kanaha Park (Maui)

Unit 6 consists of approximately 25 ha (62 ac) of State land, entirely comprised of coastal land on Maui. It is bounded on the south by the Kahului Airport, on the north by the ocean, on the east by other coastal lands, and immediately to the west by the Kanaha Pond State Sanctuary. Natural features within the unit include remnant coastal dune communities. Vegetation consists primarily of mixed-species, dry coastal shrub land communities composed of native and introduced plants, including nonnative larval host plants (HHP 2000).

We have no recent and verified Blackburn's sphinx moth observations within this unit. However, the unit is considered essential to the species' conservation because it is within the geographical area occupied by the species at the time of listing and contains the moth's adult stage primary constituent elements. Furthermore, recent observations of both larvae and adults have been documented within the adjacent Kanaha Pond State Sanctuary and in the nearby Kanaha-Spreckelsville area. Although this unit is lower in elevation than areas currently containing *Nothocestrum* plants, the persistent occurrence of Blackburn's sphinx moth within the nearby Kanaha Pond State Sanctuary, and other nearby areas, indicates this site provides habitat for this area's moth population and plays an important role in the species' population dynamics. Based upon an understanding of this species and other moth species' flight capabilities and migrational needs, we believe that designation of this area contributes to the available matrix of undeveloped habitat necessary as refugia for adult Blackburn's sphinx moths migrating to other areas of existing suitable host plant habitat on Maui in order to forage or lay eggs (A. Medeiros, pers. comm. 1998; S. Montgomery, pers. comm. 2001; McIntyre and Barrett 1992; Roderick and Gillespie 1997; Van Gelder and Conant 1998).

Unit 7: Upper Kahoolawe (Kahoolawe)

Unit 7 consists of approximately 1,721 ha (4,252 ac) on State land, encompassing portions of the upper elevational contour of Kahoolawe, approximately above 305 m (1,000 ft) in elevation. Kahoolawe is located approximately 11 km (6.7 mi) south of