

Puu Ouli. It, in combination with Ulupalakua and Haleakala ranches, and Maui 9—*Alectryon macrococcus*—a and Maui 10—*Alectryon macrococcus*—b, provides habitat for 2 populations of 100 mature, reproducing individuals of the long-lived perennial *A. macrococcus* and is currently unoccupied. The habitat features contained in this unit that are essential for this species include, but are not limited to, mesic to wetter mesic and upper dryland forest. This unit is essential to conservation of the species because it provides for two populations within this multi-island species' historical range on Maui that are some distance away from the other critical habitat for this species, in order to avoid all populations important for the conservation of the species on the island from being destroyed by one naturally occurring catastrophic event.

Maui 17—*Alectryon macrococcus*—d

This unit is critical habitat for *Alectryon macrococcus* and is 390 ha (965 ac) on State (West Maui Forest Reserve and the Panaewa Section of West Maui NAR) and privately owned land. The unit contains portions of Wahikuli and Kealii gulches and Puuiki, Kahoma, and Kanaha streams. It, in combination with Maui 17—*Alectryon macrococcus*—e, Maui 18—*Alectryon macrococcus*—f, and Kapunakea Preserve, provides habitat for two populations of 100 mature, reproducing individuals of the long-lived perennial *A. macrococcus* and is currently unoccupied. The habitat features contained in this unit that are essential for this species include, but are not limited to, mesic to wetter mesic and upper dryland forest. This unit is essential to conservation of the species because it provides for two populations within this multi-island species' historical range on Maui that are some distance away from the other critical habitat for this species, in order to avoid all populations important for the conservation of the species on the island from being destroyed by one naturally occurring catastrophic event.

Maui 17—*Alectryon macrococcus*—e

This unit is critical habitat for *Alectryon macrococcus* and is 110 ha (271 ac) on State (West Maui Forest Reserve) and privately owned land. The unit contains Honokowai Stream. It, in combination with Maui 17—*Alectryon macrococcus*—d, Maui 18—*Alectryon macrococcus*—f and Kapunakea Preserve, provides habitat for two populations of 100 mature, reproducing individuals of the long-lived perennial *A. macrococcus* and is currently occupied by three plants. The habitat

features contained in this unit that are essential for this species include, but are not limited to, mesic to wetter mesic and upper dryland forest. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population. It is some distance away from the other critical habitat for this species, in order to avoid all populations important for the conservation of the species on the island from being destroyed by one naturally occurring catastrophic event.

Maui 18—*Alectryon macrococcus*—f

This unit is critical habitat for *Alectryon macrococcus* and is 8 ha (17 ac) on State (West Maui Forest Reserve) and privately owned land. The unit contains Honokawai Valley. It, in combination with Maui 17—*Alectryon macrococcus*—d, Maui 17—*Alectryon macrococcus*—e, and Kapunakea Preserve, provides habitat for two populations of 100 mature, reproducing individuals of the long-lived perennial *A. macrococcus* and is currently unoccupied. The habitat features contained in this unit that are essential for this species include, but are not limited to, mesic to wetter mesic and upper dryland forest. This unit is essential to conservation of the species because it provides for two populations within this multi-island species' historical range on Maui that are some distance away from the other critical habitat for this species, in order to avoid all populations important for the conservation of the species on the island from being destroyed by one naturally occurring catastrophic event.

Maui 9—*Argyroxiphium sandwicense* ssp. *macrocephalum*—a

This unit is critical habitat for *Argyroxiphium sandwicense* ssp. *macrocephalum* and is 8,965 ha (22,153 ac) on State (Kula and Kahikinui Forest Reserve), Federal (Haleakala National Park), and privately owned land. The unit contains portions of Halalii Summit, Haleakala Summit, Haleakala Crater, Hanakauhi Summit, Haupaakea Peak Summit, Hina Summit, Honokahua Summit, Ka Moa o Pele Summit, Kalahaku Pali, Kalepeamo Summit, Kalua Awa Summit, Kaluaiki Crater, Kaluanui Crater, Kaluu o ka Oo Crater, Kamaolii Summit, Kanahau Summit, Keoneheehee Ridge, Kilohana Summit, Kolekole Summit, Koolau Gap, and Kumuilahi. It provides habitat for one population of greater than 50,000 mature, reproducing individuals of the long-lived perennial *A. sandwicense* ssp. *macrocephalum* and is currently

occupied by 39,000 to 44,000 plants. The habitat features contained in this unit that are essential for this species include, but are not limited to, lava flows with almost no soil development and otherwise barren, unstable slopes of recent (less than several thousand years old) volcanic cinder cones subject to frequent formation of ice at night and extreme heating during cloudless days with an annual precipitation of approximately 75 to 250 cm (29.6 to 98.4 in). This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population. Although we do not feel that there is enough habitat designated to reach the recovery goal of 8 to 10 populations, this species is a very narrow endemic in terms of its alpine habitat requirement, and probably never naturally occurred in more than a single or a few populations.

Maui 9—*Asplenium fragile* var. *insulare*—a

This unit is critical habitat for *Asplenium fragile* var. *insulare* and is 362 ha (894 ac) on federally owned land (Haleakala National Park). The unit contains Koolau Gap. This unit, in combination with Waikamoi Preserve, provides habitat for two populations of 300 mature, reproducing individuals of the short-lived perennial *A. fragile* var. *insulare* and is currently unoccupied. The habitat features contained in this unit that are essential for this species include, but are not limited to, streamside hollows and grottos in gulches. This unit is essential to conservation of the species because it provides for two populations within this multi-island species' historical range on Maui that are some distance away from the other critical habitat for this species, in order to avoid all populations important for the conservation of the species on the island from being destroyed by one naturally occurring catastrophic event.

Maui 9—*Bidens micrantha* ssp. *kalealaha*—a

This unit is critical habitat for *Bidens micrantha* ssp. *kalealaha* and is 1,562 ha (3,862 ac) on State (Kahikinui Forest Reserve), Federal, and privately owned land. The unit contains portions of Kumuilahi and Haleakala summits, Pukai, Pahihi, and Waioale gulches, Haleakala Crater, and Kumuilahi. It provides habitat for 3 populations of 300 mature, reproducing individuals of the short-lived perennial *B. micrantha* ssp. *kalealaha* and is currently occupied by two plants. The habitat features