

Map Guide to Marine Turtle Nesting and Basking in the Hawaiian Islands

December 2015

Data mapping product by NOAA-PIFSC Marine Turtle Research Program (Denise Parker and George Balazs) in collaboration with Hawai'i Preparatory Academy (Marc Rice), HVNP Hawai'i Island Hawksbill Turtle Recovery Project (Will Seitz), the Kaho'olawe Island Reserve Commission, Malama na Honu (Joanne Pettigrew), Maui Coastal Land Trust, National Botanical Tropical Gardens, NOAA PIRO Protected Resources Division (Kimberly Maison, Irene Kelly), Pacific Missile Range Facility (John Burger), Sea Life Park Hawai'i (Jeff Pawloski), State of Hawai'i DLNR (Donald Heacock, Skippy Hau, Mike Coelho, Bill Puleloa), The Hawai'i Wildlife Fund (Cheryl King), The Nature Conservancy Moloka'i Turtle Trackers, Turtle Trax (Peter Bennett, Ursula Keuper-Bennett), US Fish and Wildlife Service (Glynnis Nakai, John Klavitter, Joy Hiromasa), and the University of Hawai'i Maui College (Donna Brown).

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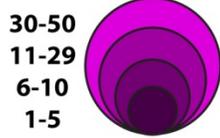
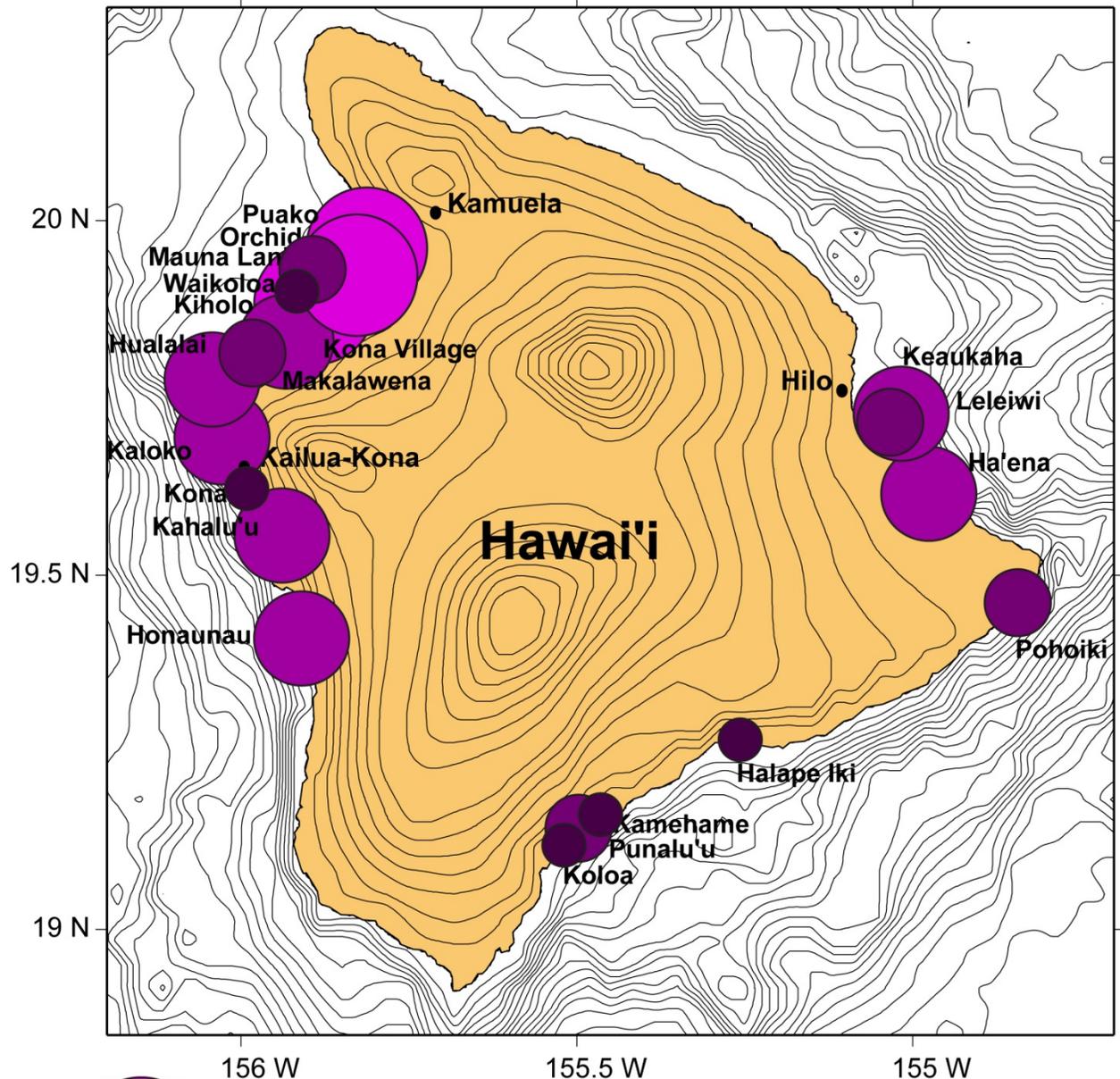
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Selected References

- Balazs, G. H. 1976. Green turtle migrations in the Hawaiian Archipelago. *Biol. Conserv.* 9:125-140.
- . 1978. Terrestrial critical habitat for sea turtles under United States jurisdiction in the Pacific region. *'Elepaio* 39(4):37-41.
- . 1985. History of sea turtles at Polihua Beach on northern Lanai. *'Elepaio* 46(1):1-3.
- . 1996. Behavioral changes within the recovering Hawaiian green turtle population. *In* J.A. Keinath, D.E. Barnard, J.A. Musick, and B.A. Bell (comps.), *Proceedings of the Fifteenth Annual Symposium on Sea Turtle Biology and Conservation*, February 20-25, 1995, Hilton Head, South Carolina, p. 16-21. U.S. Dep. Commer. NOAA Tech. Memo. NMFS-SEFSC-387.
- Balazs, G. H. and S. Hau. 1986. *Lepidochelys olivacea* nesting recorded on Maui. *Herp Review* 17(2):51.
- Balazs, G. H., G. L. Nakai, S. Hau, M. J. Grady, and W. G. Gilmartin. 2005. Year 2000 nesting of a captive-reared Hawaiian green turtle tagged and released as a yearling. *In* M.S. Coyne and R.D. Clark (comps.), *Proceedings of the Twenty-first Annual Symposium on Sea Turtle Biology and Conservation*, February 24-28, 2001, Philadelphia, Pennsylvania, p. 100-102. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-SEFSC-528.
- Dutton, P. H., G. H. Balazs, R. A. LeRoux, S. K. K. Murakawa, P. Zarate, and L. S. Martínez. 2008. Composition of Hawaiian green turtle foraging aggregations: mtDNA evidence for a distinct regional population. *Endang. Species Res.* 5:37-44.
- Ernst, C. H. and R. W. Barbour. 1972. Cheloniidae: Marine Turtles, p. 69. *In* *Turtles of the United States*. The University Press of Kentucky (Lexington).
- Hau, S. and G. Nakai. 2010. Summary of hawksbill (*Eretmochelys imbricata*) and green turtle (*Chelonia mydas*) nesting recorded on the Island of Maui, 1996-2010. DLNR and USFWS.
- Kam, A. K. H. 1984. An unusual example of basking by a green turtle in the Northwestern Hawaiian Islands. *'Elepaio* 45(1):3.
- Katahira, L. K., C. M. Forbes, A. H. Kikuta, G. H. Balazs and M. Bingham. 1994. Recent findings and management of hawksbill turtle nesting beaches in Hawaii. *In* K.A. Bjorndal, A.B. Bolten, D.A. Johnson, and P.J. Eliazar (comps.), *Proceedings of the Fourteenth Annual Symposium on Sea Turtle Biology and Conservation*, March 1-5, 1994, Hilton Head, South Carolina, p. 69. U.S. Dep. Commer. NOAA Tech. Memo. NMFS-SEFSC-351.
- King, C. S and W. G. Gilmartin. 2010. 2009 report on hawksbill sea turtle foraging and nest monitoring research. Hawai'i Wildlife Fund Hawksbill Recovery Project. USFWS Permit TE829250-6. 11p.
- Parker, D. M., G. H. Balazs, C. S. King, L. Katahira, and W. Gilmartin. 2009. Short-range movements of hawksbill turtles (*Eretmochelys imbricata*) from nesting to foraging areas within the Hawaiian Islands. *Pac. Sci.* 63(3):371-382.
- Rice, M. R., G. H. Balazs, D. K. Kopra, and G. C. Whittow. 2002. Ecology and behavior of green turtles basking at Kiholo Bay, Hawaii. *In* A. Mosier, A. Foley, and B. Brost (comps.), *Proceedings of the Twentieth Annual Symposium on Sea Turtle Biology and Conservation*, February 29-March 4, 2000, Orlando, Florida, p. 153-155. U.S. Dep. Commer., NOAA Tech. Memo. NMFSSEFSC-477.
- Scott, S. 1997, Oct 13. This turtle tale tells of a rare Hawaiian visitor. *Ocean Watch, Honolulu Star-Bulletin*
<http://archives.starbulletin.com/97/10/13/news/index.html> downloaded 2010 Dec 19.
- Seitz, W. 2010. Hawai'i Island Hawksbill Turtle Recovery Project- 2009 Annual Report. USFWS Permit TE-739923-4 and Hawai'i DLNR Permit SAP-2010-5. University of Hawaii Pacific Cooperative Studies Unit. Resource Management Division, Box 52, Hawaii Volcanoes National Park, HI 96718. 26p.
- Seitz, W.A., K.M. Kagimoto, B. Luehrs and L. Katahira. 2012. Twenty years of conservation and research findings of the Hawai'i Island Hawksbill Turtle Recovery Project, 1989 to 2009. Technical Report No. 178. The Hawai'i-Pacific Islands Cooperative Ecosystem Studies Unit & Pacific Cooperative Studies Unit, University of Hawai'i, Honolulu, Hawai'i. 117 pp.
- Whittow, G. C. and G. H. Balazs. 1982. Basking behavior of the Hawaiian green turtle (*Chelonia mydas*). *Pac. Sci.* 36(2):129-139.



Magnitude of daily green turtle basking
by location on the Island of Hawaii

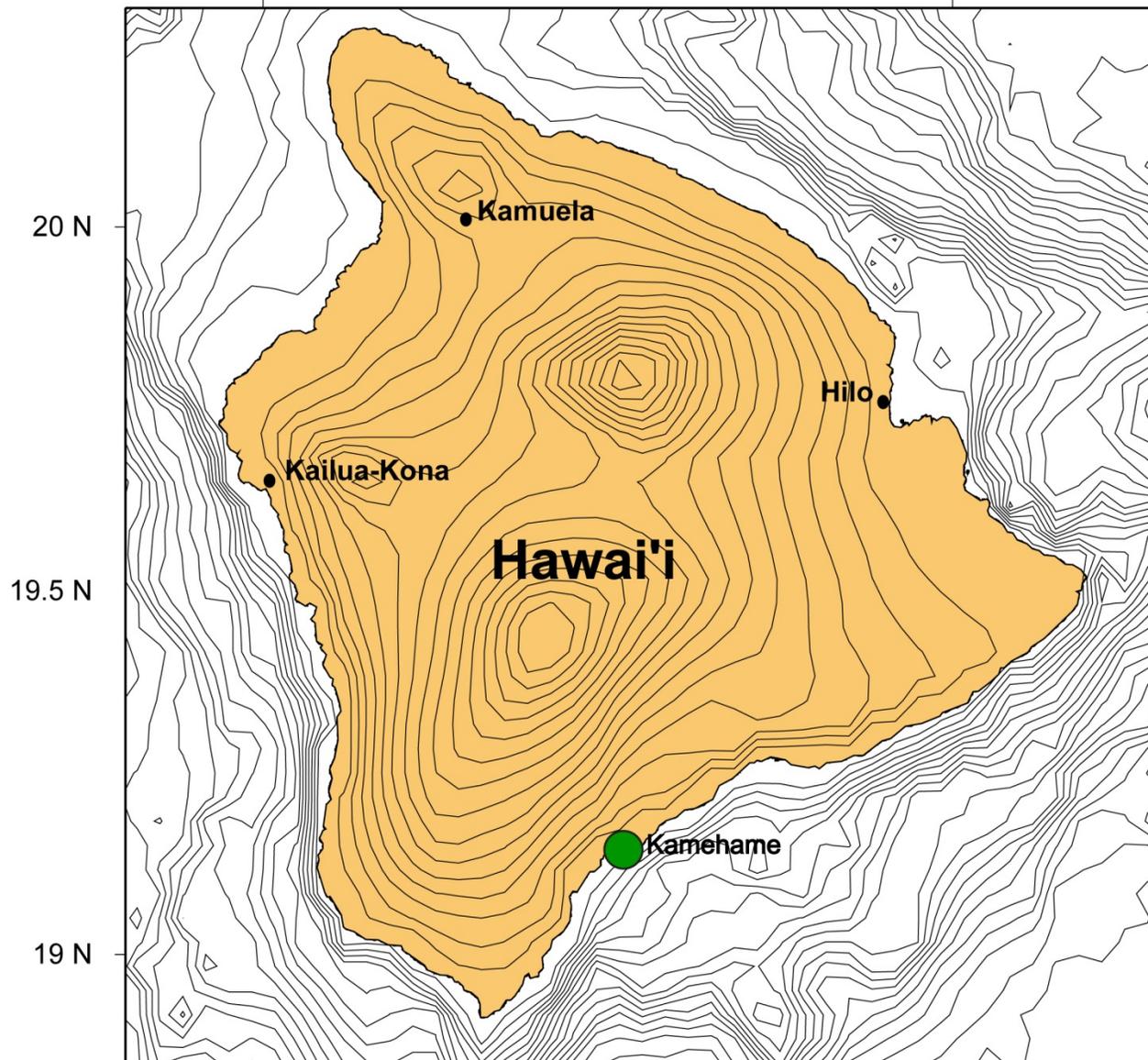
GMT map created by Denise Parker JIMAR-PIFSC

Topography lines represent 250m



Green turtle (*Chelonia mydas*) basking locations recorded on the Island of Hawai'i

PLACE NAME	LATITUDE (N)	LONGITUDE (W)	MAGNITUDE	FREQUENCY
Honaunau	19° 25.3'	155° 54.7'	11-29	Regular
Kahalu'u	19° 34.8'	155° 58.0'	11-29	Regular
Kona Tennis Club	19° 37.8'	155° 59.4'	1-5	Intermittent
Kaloko-Honokohau	19° 40.3'	156° 1.6'	11-29	Regular
Makalawena	19° 47.5'	156° 1.6'	6-10	Intermittent
Hualalai North Resort	19° 49.3'	155° 59.8'	11-29	Regular
Kona Village	19° 49.9'	155° 58.1'	6-10	Intermittent
Kiholo	19° 51.6'	155° 55.4'	30-50	Regular
Waikoloa	19° 55.5'	155° 53.3'	6-10	Regular
Mauna Lani	19° 56.6'	155° 52.2'	30-50	Regular
Orchid Hotel	19° 57.1'	155° 51.7'	6-10	Regular
Puako	19° 57.8'	155° 51.3'	30-50	Regular
CarlSmith Park (4-mile)	19° 44.0'	155° 1.7'	6-10	Regular
Leleiwi Park (Waiuli, Wai'olena)	19° 44.1'	155° 0.8'	11-29	Regular
Ha'ena (Shipman)	19° 38.5'	154° 58.6'	11-29	Regular
Pohoiki	19° 27.4	154° 50.5'	6-10	Intermittent
Halape Iki	19° 16.2'	155° 15.6'	1-5	Intermittent
Kamehame	19° 8.7'	155° 28.1'	1-5	Intermittent
Punalu'u	19° 8.1	155° 30.3'	6-10	Regular
Koloa	19° 7.6'	155° 30.7'	1-5	Intermittent



3-4
 1-2
 <1



Estimated number of green turtle nesters
 per year on Hawai'i

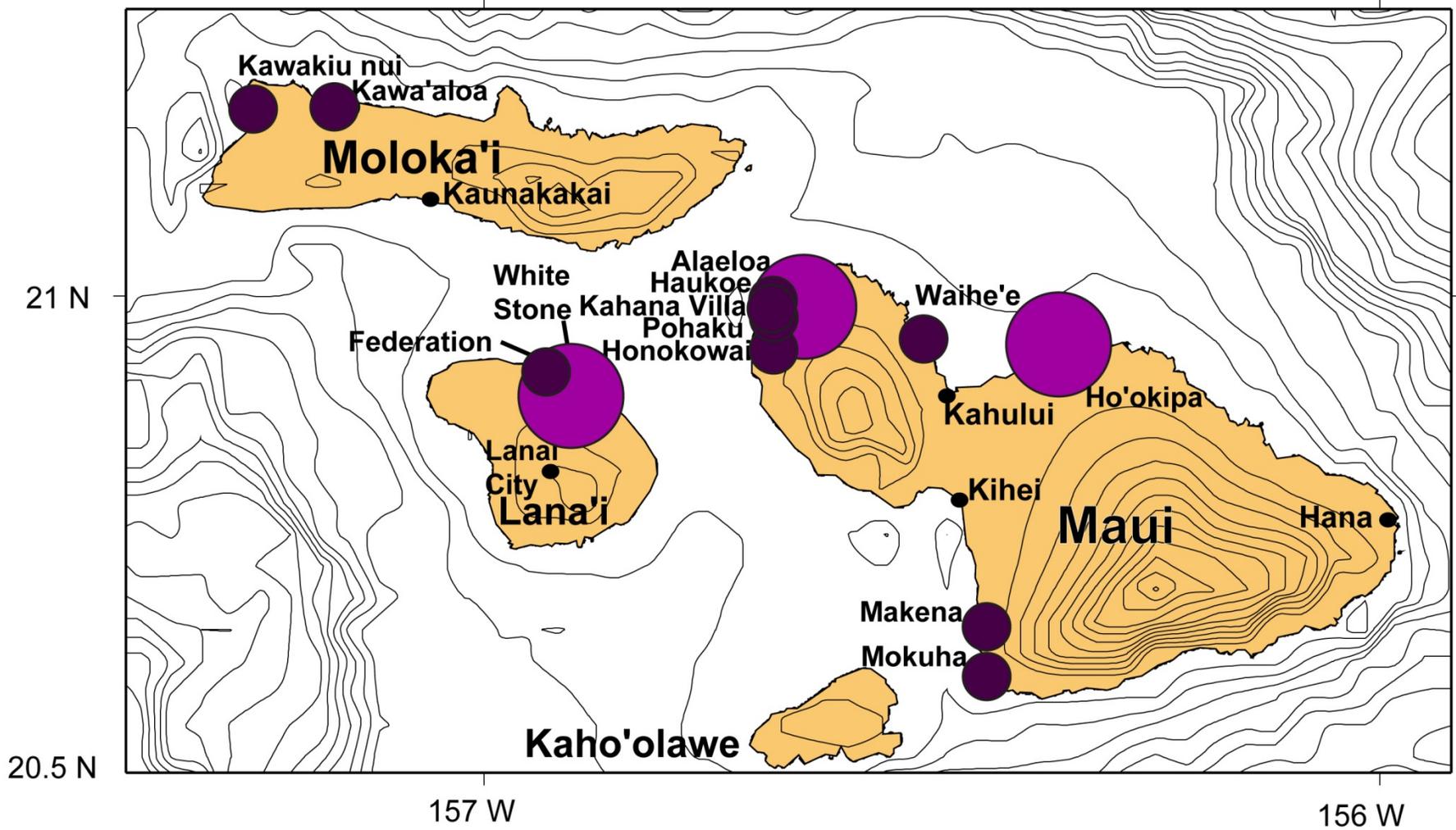
GMT map created by Denise Parker JIMAR-PIFSC

Topography lines represent 250m



Green turtle (*Chelonia mydas*) nesting locations recorded on the Island of Hawai'i

PLACE NAME	LATITUDE (N)	LONGITUDE (W)	MAGNITUDE	FREQUENCY
Kamehame	19° 8.7'	155° 28.1'	<1	Rare



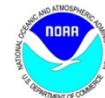
30-50
11-29
6-10
1-5



Magnitude of daily green turtle basking
by location in Maui County

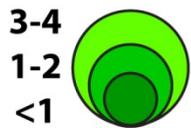
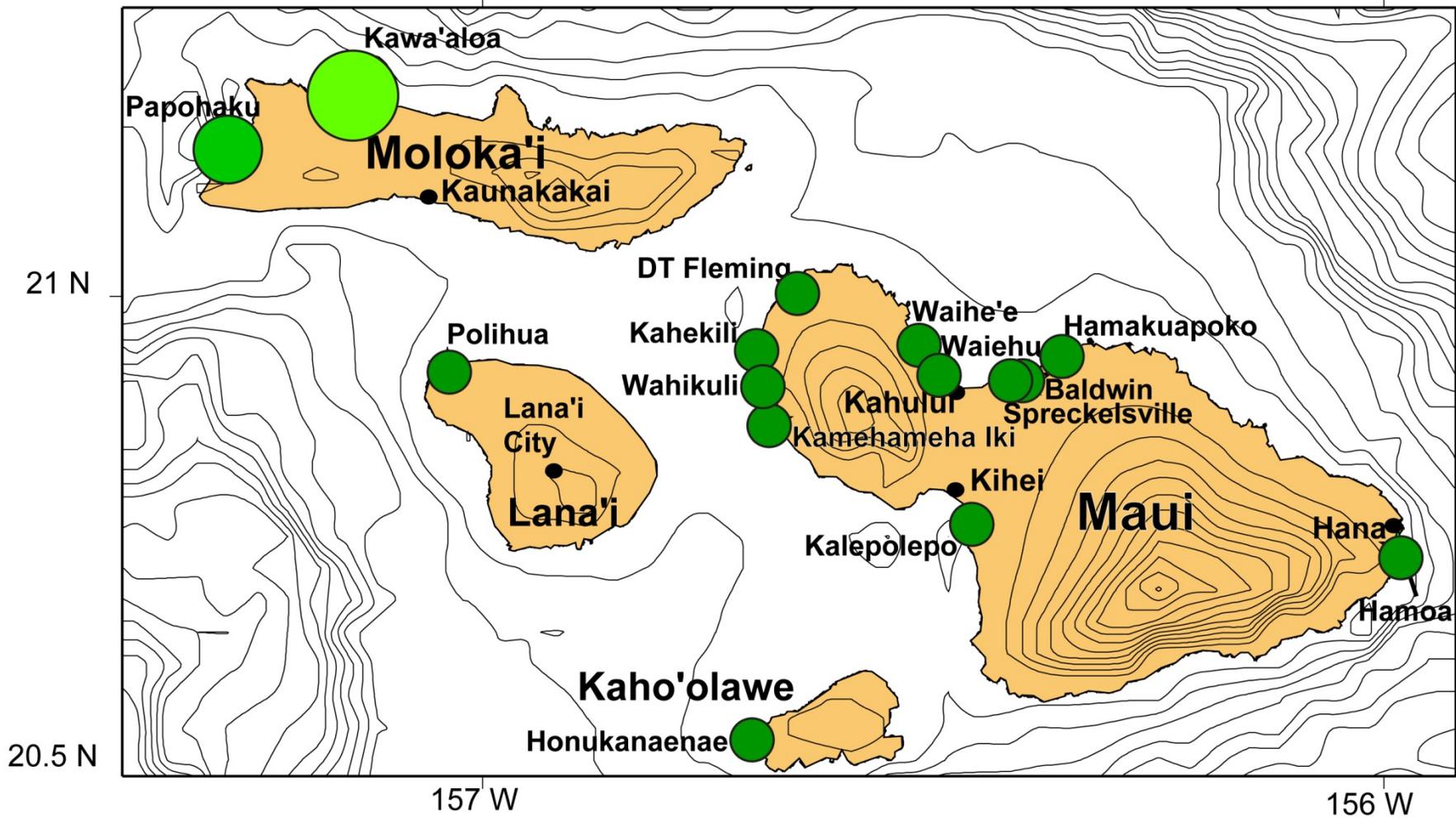
Topography lines represent 250m

GMT map created by Denise Parker JIMAR-PIFSC



Green turtle (*Chelonia mydas*) basking locations recorded in Maui County

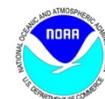
PLACE NAME	LATITUDE (N)	LONGITUDE (W)	MAGNITUDE	FREQUENCY
Moloka'i				
Kawa'aloa	21° 11.9'	157° 9.2'	1-5	Intermittent
Kawakiu Nui	21° 12.2'	157° 14.9'	1-5	Intermittent
Lana'i				
White Stone	20° 53.7'	156° 52.4'	11-29	Regular
Federation Camp	20° 54.7'	156° 53.8'	1-5	Intermittent
Maui				
Mokuha (Fishbowl)	20° 36.0'	156° 26.2'	1-5	Intermittent
Makena Landing/5 caves	20° 39.4'	156° 26.5'	1-5	Intermittent
Honokowai	20° 57.3'	156° 41.2'	1-5	Intermittent
Pohaku Park (S-Turns)	20° 58.0'	156° 40.9'	1-5	Intermittent
Kahana Villa Resort	20° 58.1'	156° 40.8'	1-5	Intermittent
Napili (Honolani)	20° 58.4	156° 40.7'	1-5	Intermittent
Haukoe (Hale Malia Rd)	20° 59.2'	156° 40.3'	1-5	Intermittent
Alaeloa	20° 59.3'	156° 40.2'	11-29	Regular
Waihe'e	20° 57'	156° 30.7'	1-5	Intermittent
Ho'okipa	20° 56.0'	156° 21.5'	30-50	Regular



Estimated number of green turtle nesters per year in Maui County

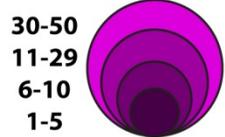
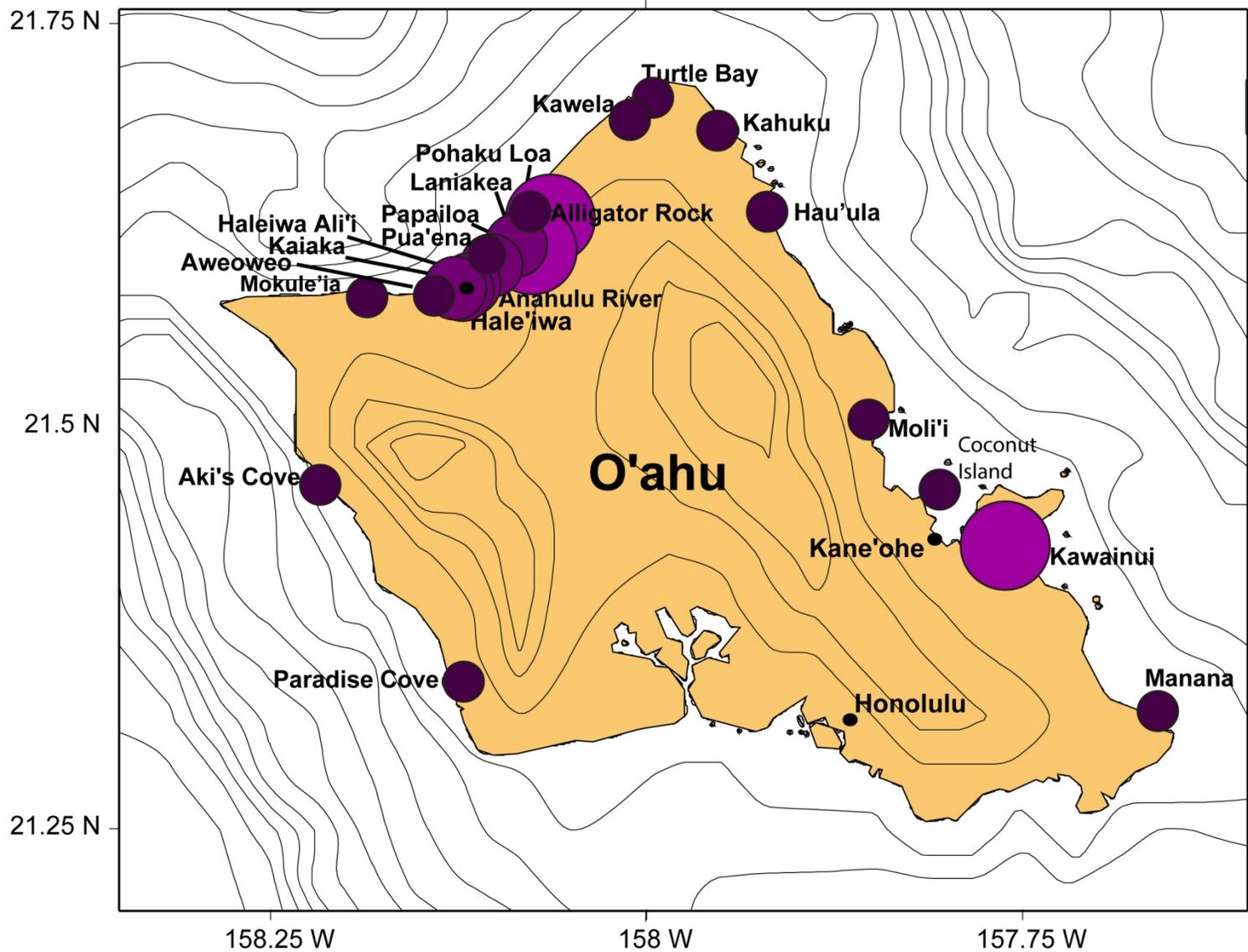
GMT map created by Denise Parker JIMAR-PIFSC

Topography lines represent 250m



Green turtle (*Chelonia mydas*) nesting locations recorded in Maui County

PLACE NAME	LATITUDE (N)	LONGITUDE (W)	MAGNITUDE	FREQUENCY
Moloka'i				
Papohaku	21° 9.6'	157° 16.2'	1-2	Regular
Kawa'aloa	21° 11.9'	157° 9.2'	3-4	Regular
Lana'i				
Polihua	20° 55.3'	157° 2.1'	<1	Rare
Kaho'olawe				
Honukanaenae	20° 31.4'	156° 41.7'	<1	Rare
Maui				
Kalepolepo, Kihei	20° 45.9'	156° 27.5'	<1	Intermittent
Kamehameha Iki, Lahaina	20° 52.1'	156° 40.6'	<1	Intermittent
Wahikuli	20° 54.2'	156° 41.1'	<1	Intermittent
Kahekili, Honua Kai Resort (North Beach), Ka'anapali	20° 56.7'	156° 41.5'	<1	Intermittent
D.T. Fleming Beach, Kapalua	21° 0.3'	156° 39.0'	<1	Intermittent
Waihe'e	20° 56.2'	156° 30.4'	<1	Intermittent
Waiehu	20° 54.8'	156° 29.5'	<1	Intermittent
Spreckelsville	20° 54.4'	156° 25.7'	<1	Intermittent
Baldwin Beach, Pai'a	20° 54.8'	156° 23.7'	<1	Intermittent
Hamakuapoko (H-poko), Ku'au	20° 55.9'	156° 21.8'	<1	Intermittent
Hamoia	20° 43.2'	155° 59.2'	<1	Intermittent



Magnitude of daily green turtle basking by location on the Island of O'ahu

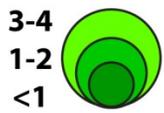
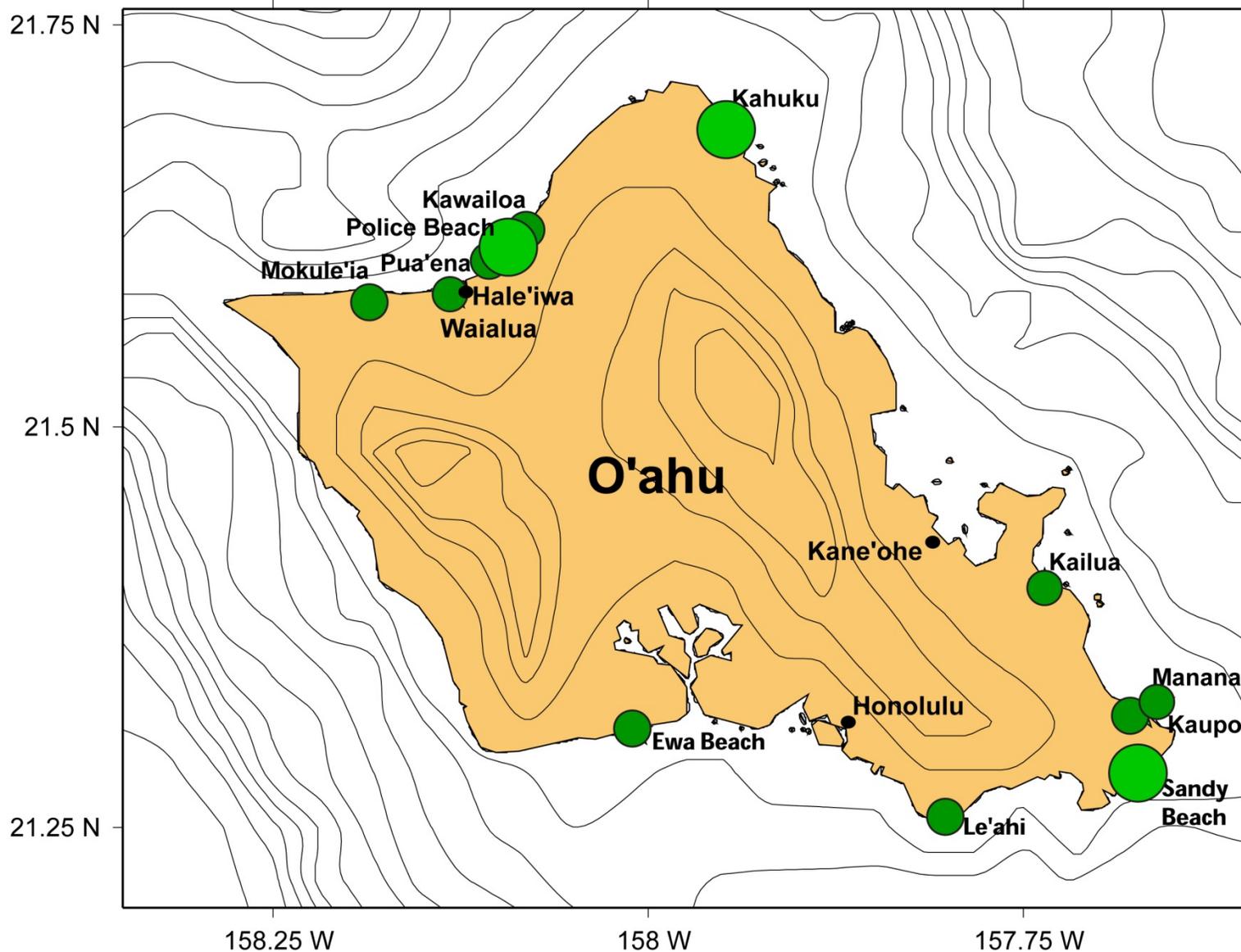
GMT map created by Denise Parker JIMAR-PIFSC

Topography lines represent 250m



Green turtle (*Chelonia mydas*) basking locations recorded on O'ahu

PLACE NAME	LATITUDE (N)	LONGITUDE (W)	MAGNITUDE	FREQUENCY
Paradise Cove (Ko Olina)	21° 20.5'	158° 7.7'	1-5	Intermittent
Aki's Cove	21° 28.1'	158° 13.0'	1-5	Intermittent
Mokule'ia	21° 34.8'	158° 9.1'	1-5	Rare
Aweoweo Beach Park	21° 35.0'	158° 8.4'	1-5	Intermittent
Kaiaka Beach	21° 35.3'	158° 7.0'	1-5	Intermittent
Haleiwa Ali'i Beach Park	21° 35.6'	158° 6.6'	6-10	Regular
Anahulu River	21° 35.7'	158° 6.3'	6-10	Regular
Pua'ena Point	21° 36.1'	158° 6.4'	6-10	Regular
Papailoa	21° 36.8'	158° 5.6'	6-10	Regular
Laniakea	21° 37.1'	158° 5.1'	11-29	Regular
Chun's Reef	21° 37.3'	158° 4.9'	1-5	Intermittent
Pohaku Loa Way	21° 37.7'	158° 5.0'	11-29	Regular
Alligator Rock	21° 37.8'	158° 4.4'	1-5	Intermittent
Kawela Bay	21° 41.7'	158° 0.7'	1-5	Intermittent
Turtle Bay	21° 42.3'	157° 59.8'	1-5	Intermittent
Kahuku	21° 41.1'	157° 56.7'	1-5	Intermittent
Hau'ula	21° 36.7'	157° 54.6'	1-5	Intermittent
Moli'i	21° 30.4'	157° 50.8'	1-5	Intermittent
Coconut Is (Kaneohe Bay)	21° 26.1'	157° 47.3'	1-5	Rare
Kawainui Canal	21° 25.5'	157° 44.6'	11-29	Regular
Manana	21° 19.7'	157° 39.6'	1-5	Intermittent



Estimated number of green turtle nesters per year on O'ahu

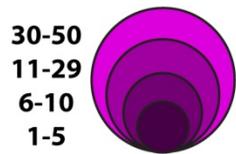
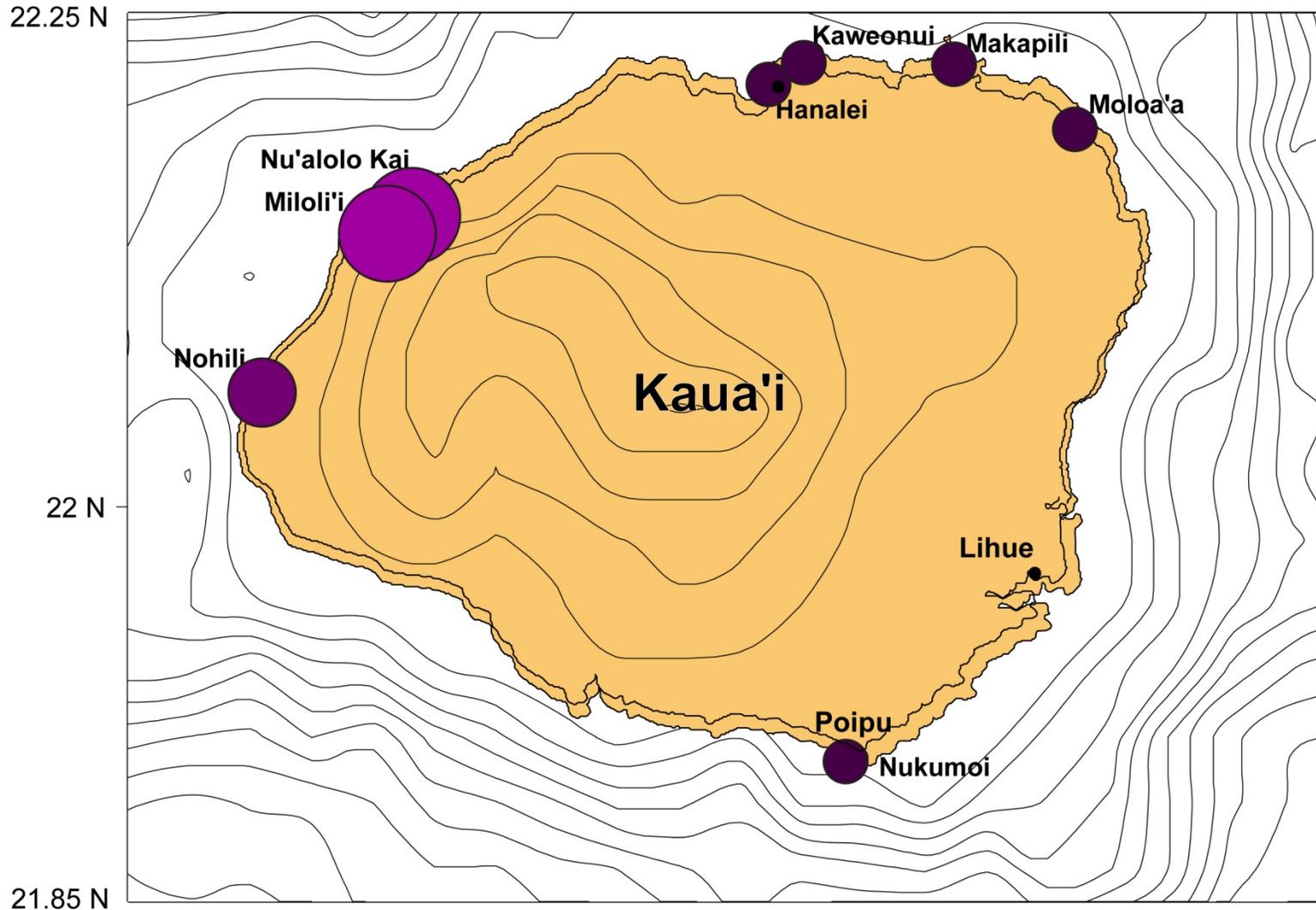
Topography lines represent 250m

GMT map created by Denise Parker JIMAR-PIFSC



Green turtle (*Chelonia mydas*) nesting locations recorded on O'ahu

PLACE NAME	LATITUDE (N)	LONGITUDE (W)	MAGNITUDE	FREQUENCY
Mokule'ia	21° 34.9'	158° 11.0'	<1	Intermittent
Waialua	21° 34.9'	158° 7.7'	<1	Intermittent
Pua'ena Point	21° 36.1'	158° 6.4'	<1	Intermittent
Police Beach	21° 36.8'	158° 5.6'	1-2	Regular
Kawailoa	21° 37.4'	158° 5.0'	<1	Intermittent
Ewa Beach	21° 18.6'	158° 0.4'	<1	Intermittent
Kahuku	21° 41.1'	157° 56.7'	1-2	Regular
Kailua	21° 24.1'	157° 44.2'	<1	Intermittent
Manana	21° 19.7'	157° 39.6'	<1	Intermittent
Kaupo	21° 18.9'	157° 40.0'	<1	Intermittent
Sandy Beach	21° 17.2'	157° 40.2'	1-2	Regular
Le'ahi (Diamond Head)	21° 15.4'	157° 48.0'	<1	Unknown



Magnitude of daily green turtle basking by location on the Island of Kaua'i

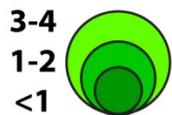
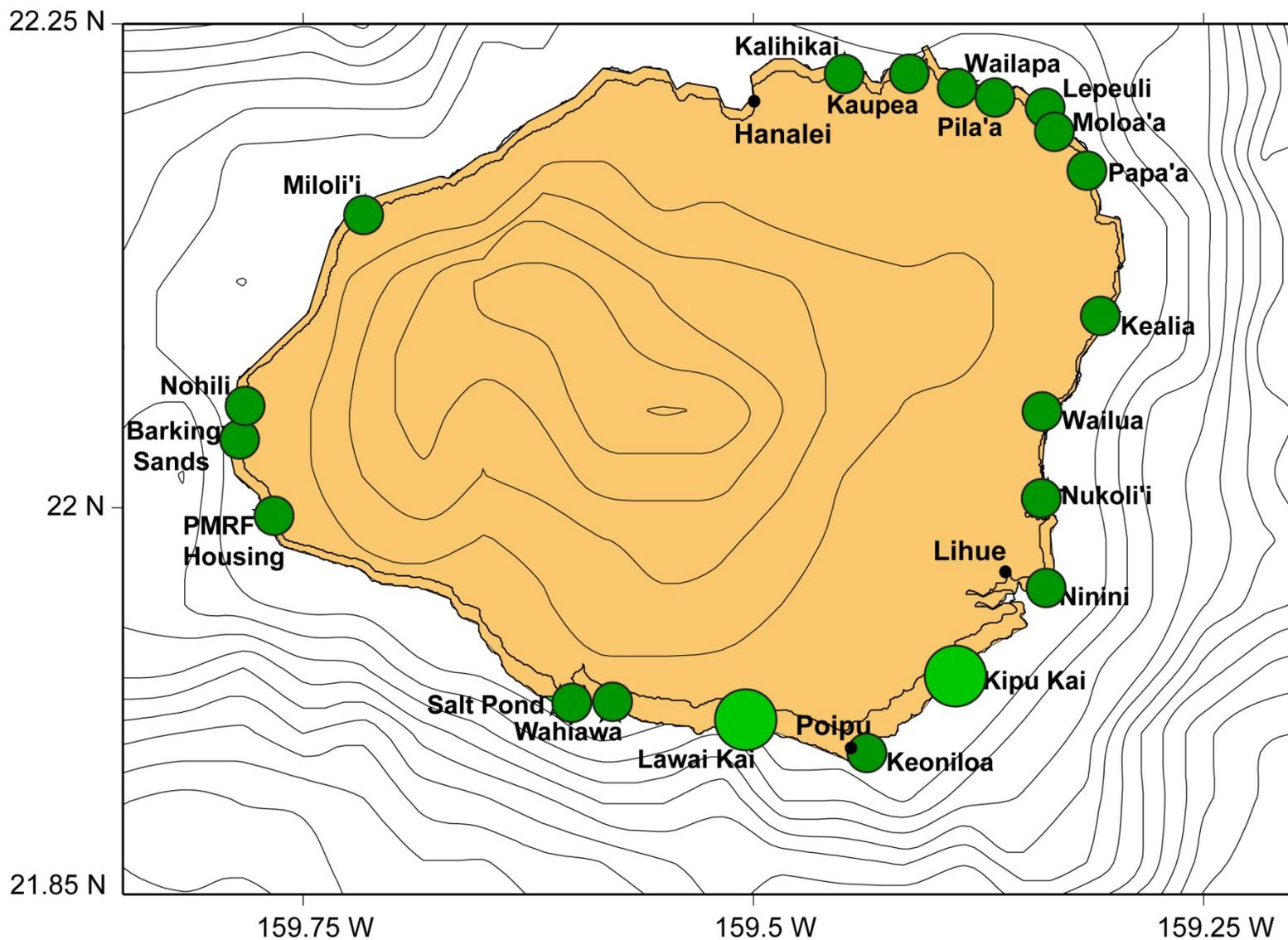
GMT map created by Denise Parker JIMAR-PIFSC

Topography lines represent 250m



Green turtle (*Chelonia mydas*) basking locations recorded on Kaua'i

PLACE NAME	LATITUDE (N)	LONGITUDE (W)	MAGNITUDE	FREQUENCY
Nukumoi, Poipu	21° 52.3'	159° 27.3'	1-5	Regular
Nohili (PMRF)	22° 3.8'	159° 47.0'	6-10	Regular
Miloli'i	22° 9.1'	159° 43.1'	30-50	Regular
Nu'alolo Kai	22° 9.5'	159° 42.0'	30-50	Regular
Hanalei	22° 12.8'	159° 29.8'	1-5	Intermittent
Kaweonui	22° 13.7'	159° 28.7'	1-5	Intermittent
Makapili (Crater Hill)	22° 13.5'	159° 23.8'	1-5	Intermittent
Moloa'a	22° 11.6'	159° 20.0'	1-5	Unknown



Estimated number of green turtle nesters per year on Kaua'i

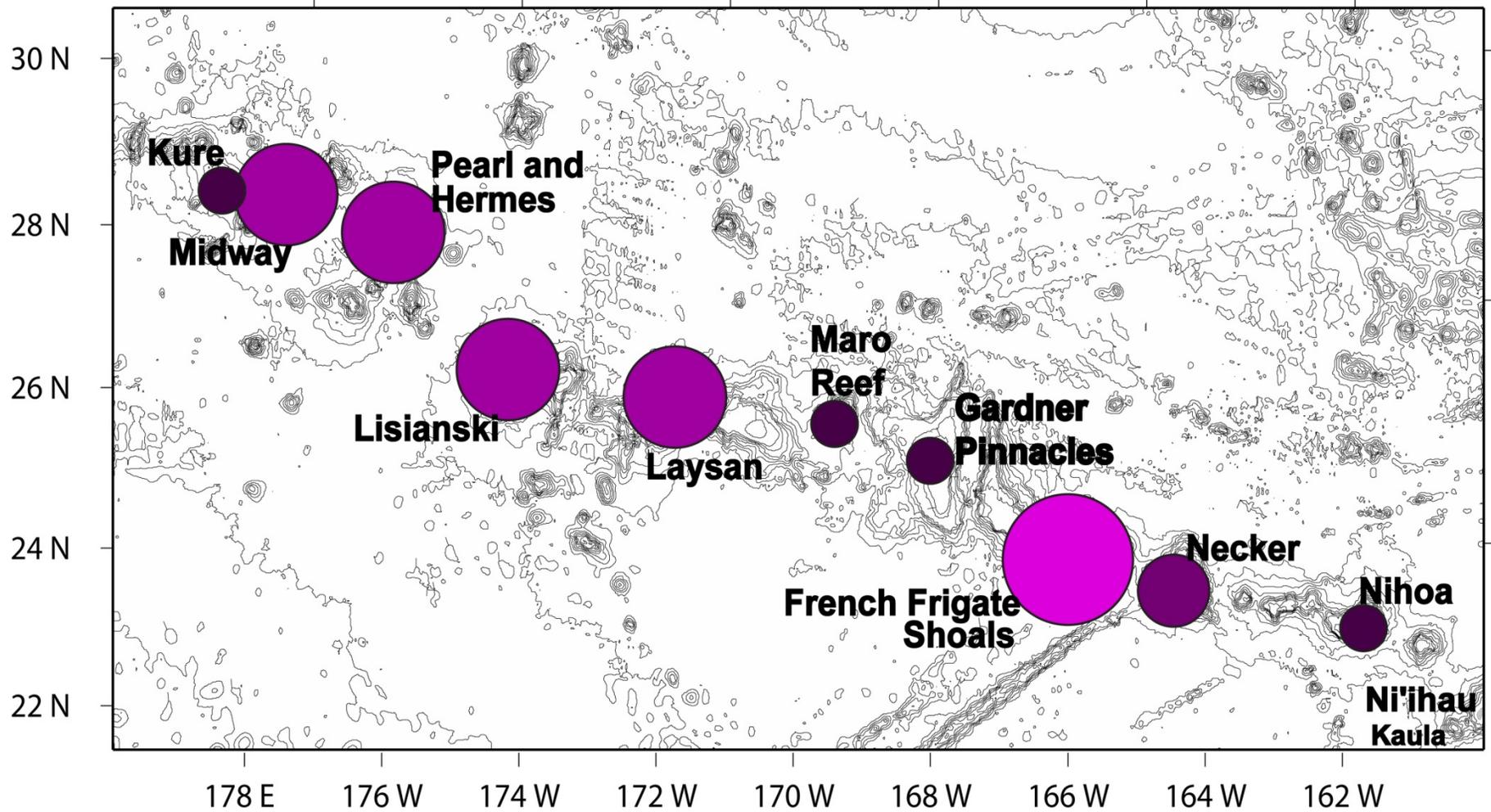
GMT map created by Denise Parker JIMAR-PIFSC

Topography lines represent 250m



Green turtle (*Chelonia mydas*) nesting locations recorded on Kaua'i

PLACE NAME	LATITUDE (N)	LONGITUDE (W)	MAGNITUDE	FREQUENCY
Lawai Kai	21° 53.3'	159° 30.1'	1-2	Regular
Wahiawa	21° 53.8'	159° 34.5'	<1	Intermittent
Salt Pond County Beach Park	21° 54.0'	159° 36.4'	<1	Intermittent
PMRF, Pacific Missile Range Facility Housing	21° 59.8'	159° 46.1'	<1	Intermittent
Barking Sands	22° 3.9'	159° 46.9'	<1	Intermittent
Nohili ditch	22° 3.2'	159° 47.0'	<1	Intermittent
Miloli'i	22° 9.1'	159° 43.1'	<1	Intermittent
Kalihikai	22° 13.6'	159° 26.9'	<1	Intermittent
Kauapea (Secret Beach)	22° 13.4'	159° 24.7'	<1	Unknown
Wailapa	22° 13.0'	159° 23.1'	<1	Unknown
Pila'a	22° 12.7'	159° 21.9'	<1	Unknown
Lepeuli, (Larsen's Beach)	22° 12.3'	159° 20.3'	<1	Unknown
Moloa'a	22° 11.6'	159° 20.0'	<1	Unknown
Papa'a	22° 10.4'	159° 18.8'	<1	Unknown
Kealia	22° 5.9'	159° 18.3'	<1	Unknown
Wailua	22° 3.0'	159° 20.2'	<1	Unknown
Nukoli'i	22° 0.4'	159° 20.2'	<1	Unknown
Ninini, Nawiliwili	21° 57.5'	159° 20.3'	<1	Unknown
Kipu Kai	21° 54.8'	159° 23.6'	1-2	Regular
Keoniloa, Poipu	21° 51.5'	159° 26.3'	<1	Intermittent



Magnitude of daily green turtle basking by location in the NWHI

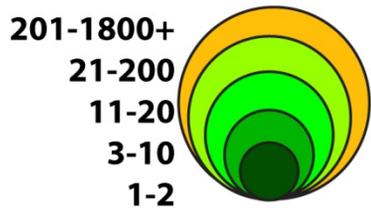
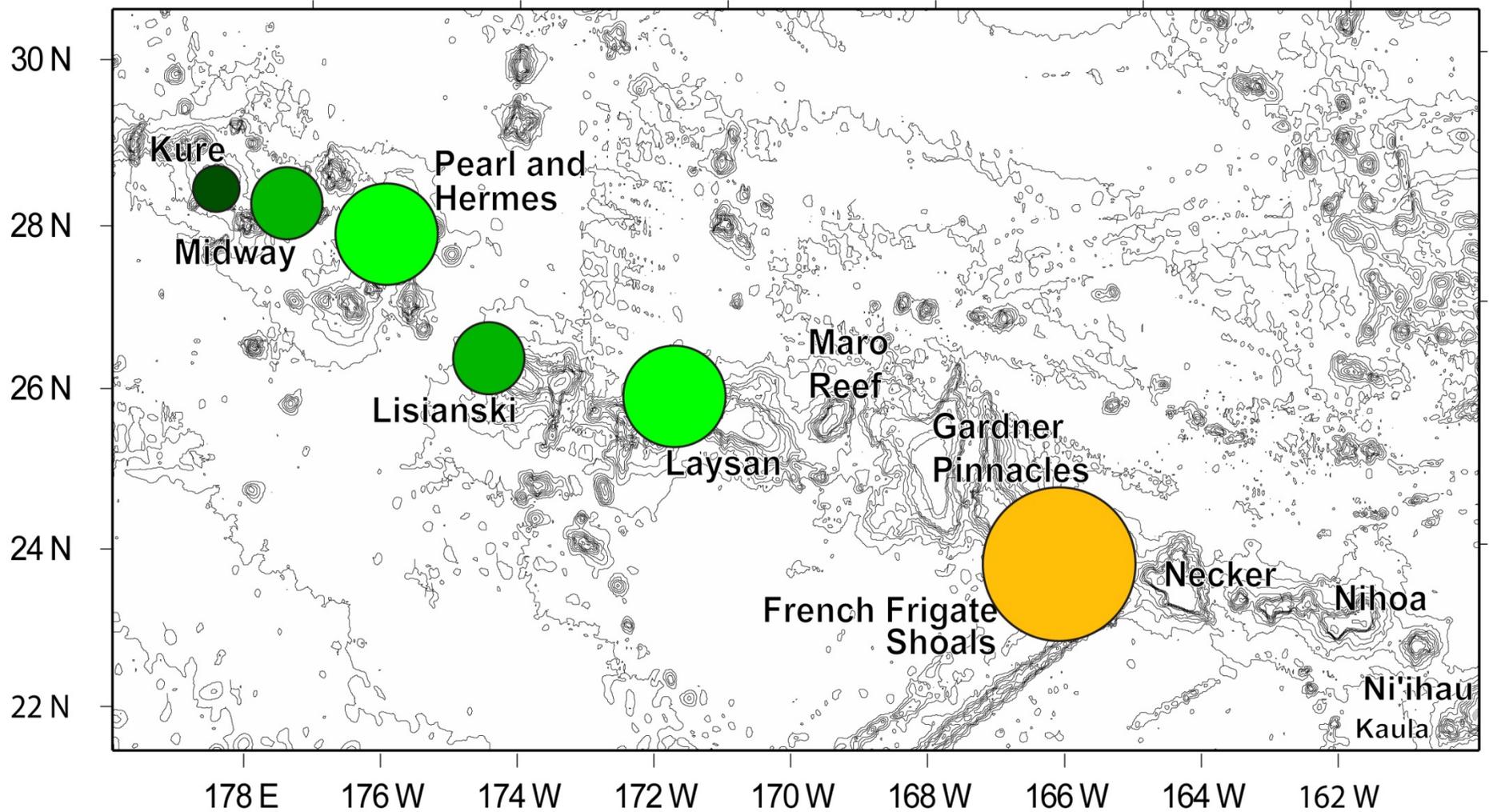
GMT map created by Denise Parker JIMAR-PIFSC



Topography lines represent 500m

Green turtle (*Chelonia mydas*) basking locations recorded from the Northwestern Hawaiian Islands

PLACE NAME	LATITUDE (N)	LONGITUDE (W)	MAGNITUDE	FREQUENCY
Nihoa	23° 23.5'	161° 55.5'	1-2	Intermittent
Necker	23° 35.0'	164° 42.0'	3-10	Regular
French Frigate Shoals	23° 45.0'	166° 10.0'	21-200+(summer)	Regular
Gardener Pinnacle	25° 1.0'	167° 59.0'	1-2	Intermittent
Maro Reef	25° 25.0'	170° 35.0'	1-2	Intermittent
Laysan	25° 50.0'	171° 50.0'	11-20	Regular
Lisianski	26° 2.0'	174° 0.0'	11-20	Regular
Pearl and Hermes	27° 55.0'	175° 45.0'	11-20	Regular
Midway	28° 13.0'	177° 22.6'	11-20	Regular
Kure	28° 25.0'	178° 25.0'	1-2	Intermittent



Estimates of annual green turtle nesting recorded in the Northwestern Hawaiian Islands

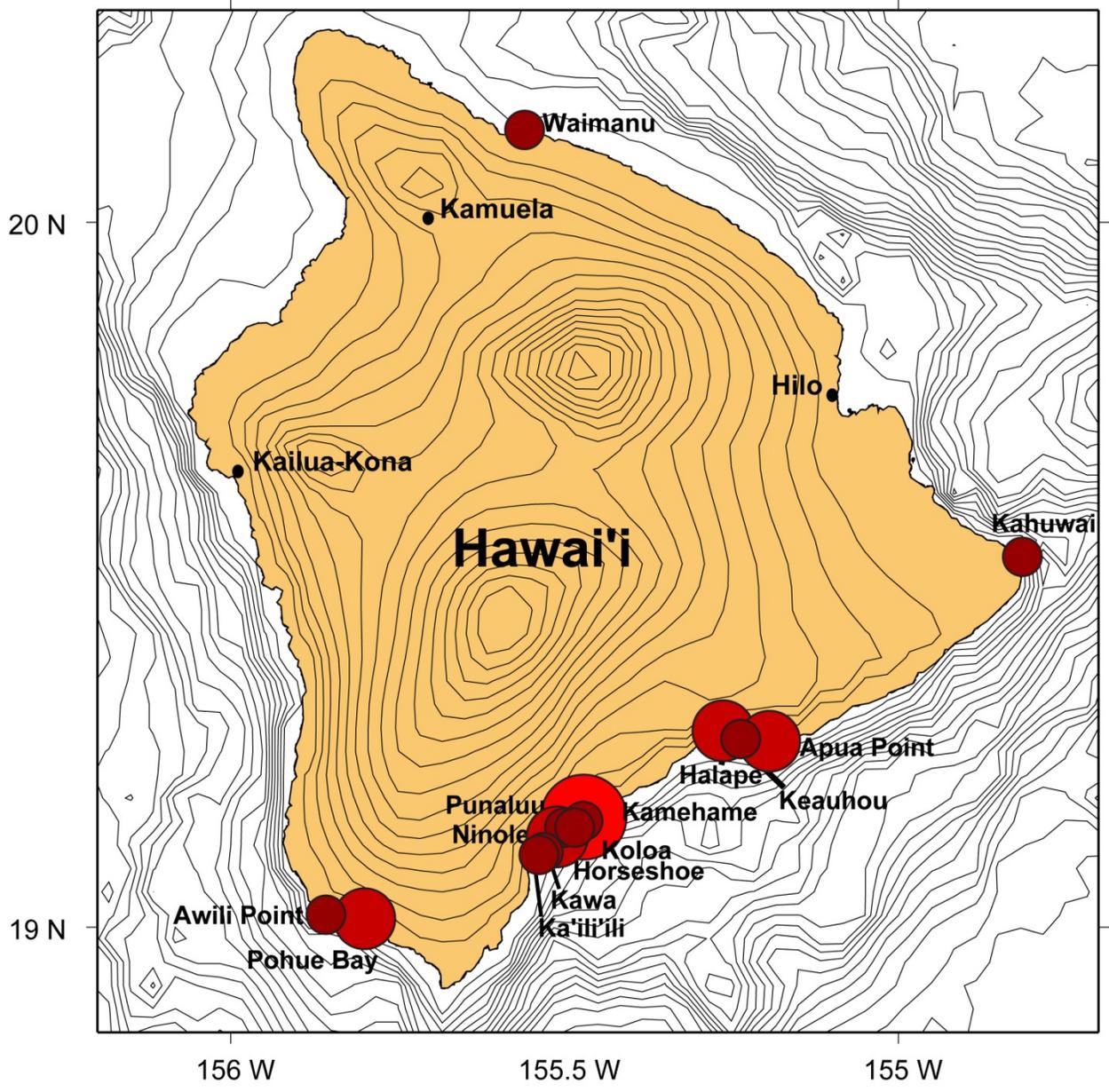
GMT map created by Denise Parker JIMAR-PIFSC



Topography lines represent 500m

Green turtle (*Chelonia mydas*) nesting locations recorded from the Northwestern Hawaiian Islands

PLACE NAME	LATITUDE (N)	LONGITUDE (W)	MAGNITUDE	FREQUENCY
French Frigate Shoals	23° 45'	166° 10'	201-1800+	Regular
East Island	23° 47.2'	166° 12.5'	---	---
Tern Island	23° 52.1'	166° 17.0'	---	---
Trig Island	23° 52.1'	166° 14.4'	---	---
Gin Island	23° 44.0'	166° 9.9'	---	---
Little Gin Island	23° 43.7'	166° 9.8'	---	---
Laysan	25° 50'	171° 50'	11-20	Regular
Lisianski	26° 2'	174° 0'	3-10	Regular
Pearl and Hermes	27° 55'	175° 45'	11-20	Regular
North Island	27° 56.0'	175° 44.0'	---	---
Southeast Island	27° 47.0'	175° 48.0'	---	---
Midway	28° 13'	177° 22.6'	3-10	Intermittent
Kure	28° 25'	178° 25'	1-2	Rare



4-5
 1-3
 <1



Estimated number of hawksbill nesters per year on Hawai'i

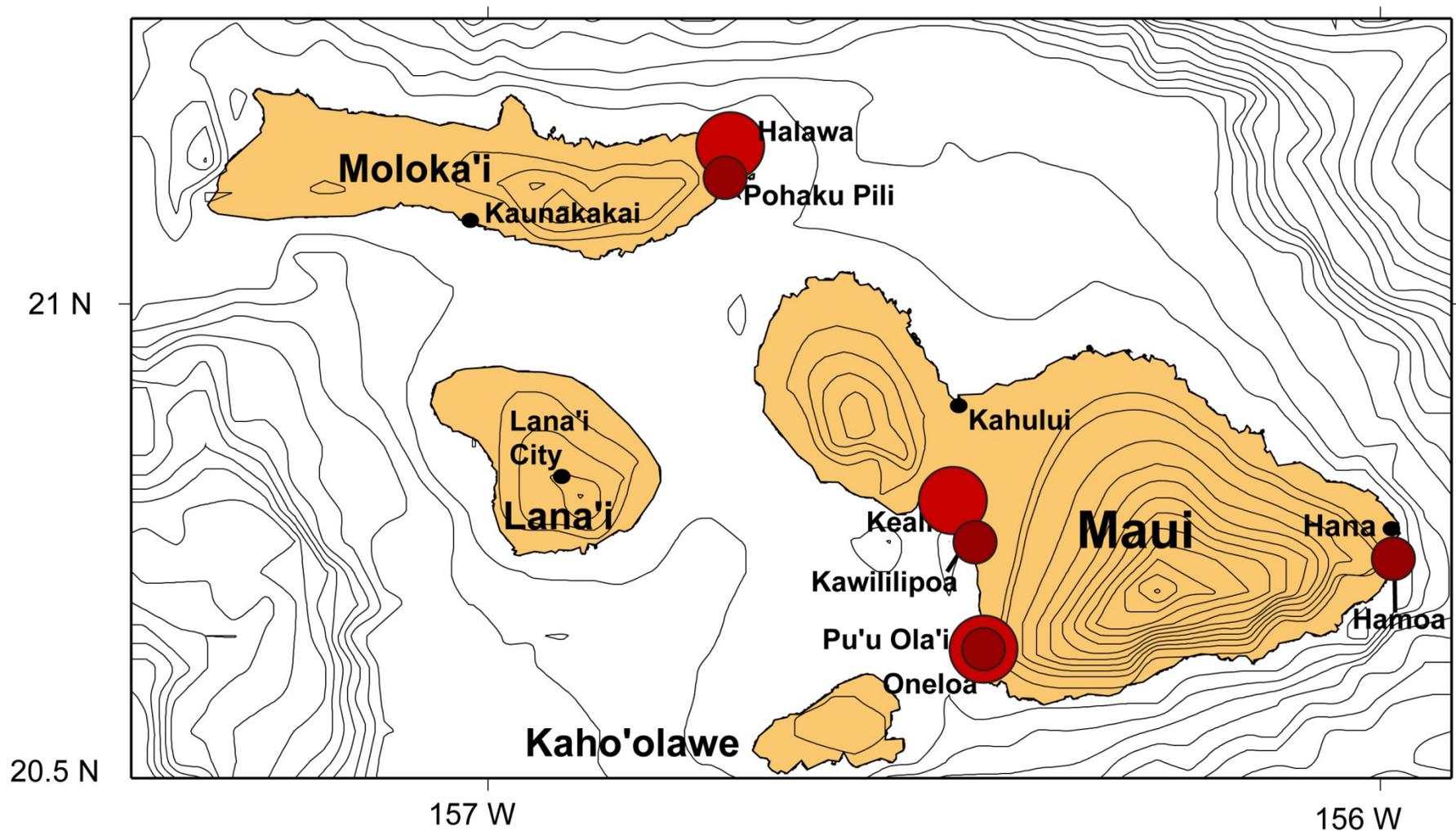
GMT map created by Denise Parker JIMAR-PIFSC



Topography lines represent 250m

Hawksbill (*Eretmochelys imbricata*) nesting locations recorded on the Island of Hawai'i

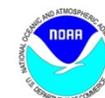
PLACE NAME	LATITUDE (N)	LONGITUDE (W)	MAGNITUDE	FREQUENCY
Waimanu	20° 7.1'	155° 35.2'	<1	Intermittent
Kahuwai (Orr's Beach)	19° 32.0'	154° 49.9'	<1	Rare
‘Āpua Point	19° 15.4'	155° 11.6'	1-3	Intermittent
Keauhou	19° 15.8'	155° 14.0'	<1	Rare
Halapē	19° 16.2'	155° 15.3'	1-3	Intermittent
Kākīwai	19° 16.0'	155° 16.6'	<1	Rare
Kamehame	19° 8.7'	155° 28.1'	4-5	Regular
Punalu'u	19° 8.1	155° 30.3'	<1	Rare
Koloa	19° 7.6'	155° 30.7'	<1	Rare
Horseshoe	19° 7.8'	155° 30.6'	<1	Rare
Nīnole	19° 7.7'	155° 30.7'	1-3	Intermittent
Kāwā	19° 6.8'	155° 31.5'	<1	Rare
Ka'ili'ili	19° 6.6'	155° 31.6'	<1	Rare
Kahakahakea	18° 59.5'	155° 46.6'	<1	Rare
Pōhue Bay	19° 0.6'	155° 47.9'	1-3	Intermittent
Humuhumu Point	19° 1.1'	155° 49.7'	<1	Rare
‘Āwili Point	19° 1.2'	155° 51.0'	<1	Intermittent
Manuka	19° 4.8'	155° 54.2'	<1	Rare



4-5  Estimated number of hawksbill nesters
 1-3  per year in Maui County
 <1 

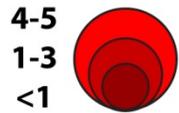
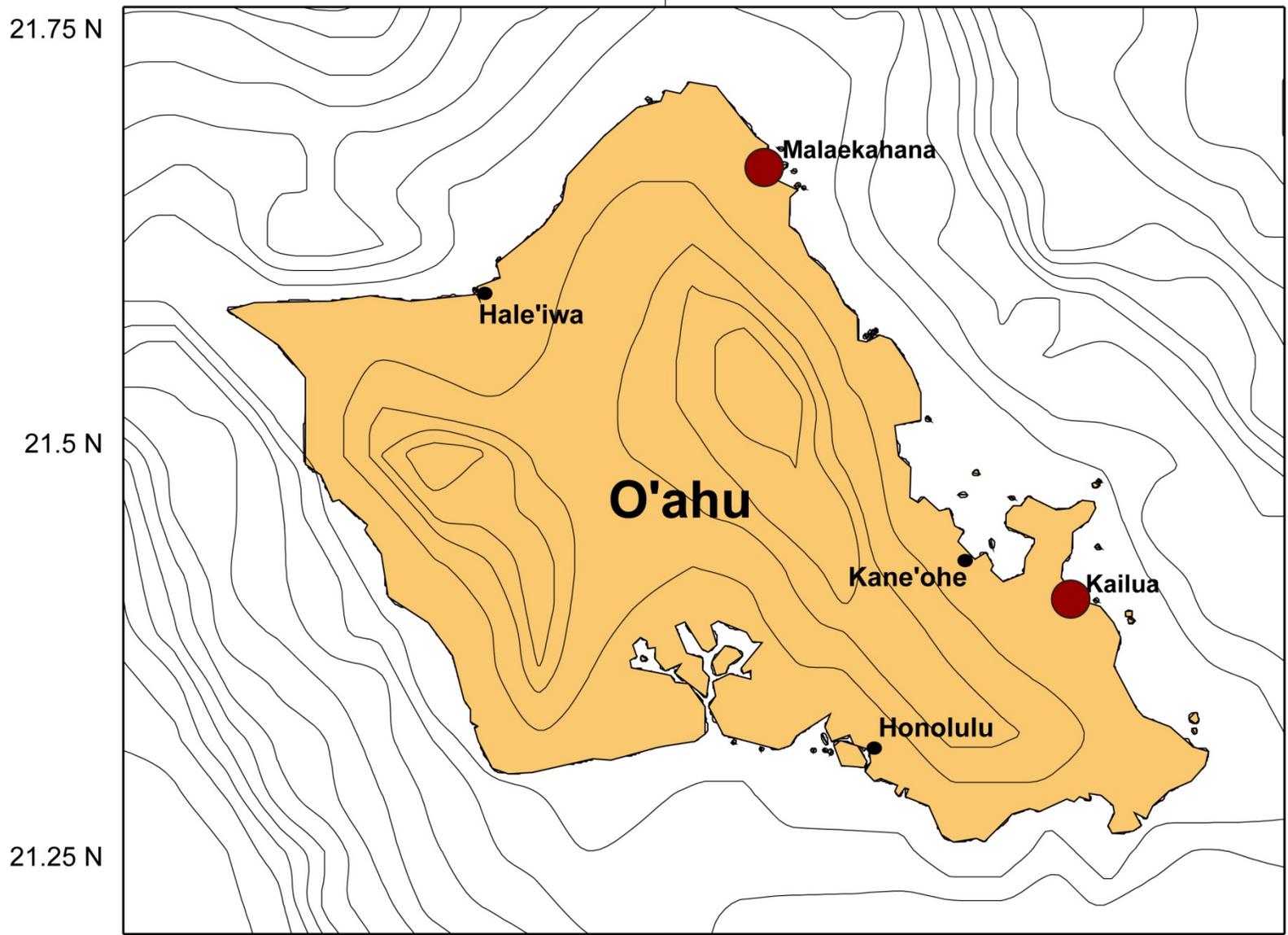
Topography lines represent 250m

GMT map created by Denise Parker JIMAR-PIFSC



Hawksbill (*Eretmochelys imbricata*) nesting locations recorded in Maui County

PLACE NAME	LATITUDE (N)	LONGITUDE (W)	MAGNITUDE	FREQUENCY
Moloka'i				
Halawa	21° 10.0'	156° 44'	1-3	Regular
Pohakupili (Fagan's)	21° 7.6'	156° 43.8'	<1	Rare
Maui				
Homoa	20° 43.2'	155° 59.2'	<1	Rare
Oneloa (Big Beach)	20° 38.0'	156° 27.0'	1-3	Regular
Pu'u Ola'i (Little Beach)	20° 38.1'	156° 27.1'	<1	Intermittent
Kawililipoa	20° 45.1'	156° 27.6'	<1	Intermittent
Kealia	20° 47.4'	156° 28.6'	1-3	Regular



4-5
1-3
<1

Estimated number of hawksbill nesters per year on O'ahu

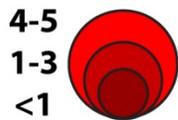
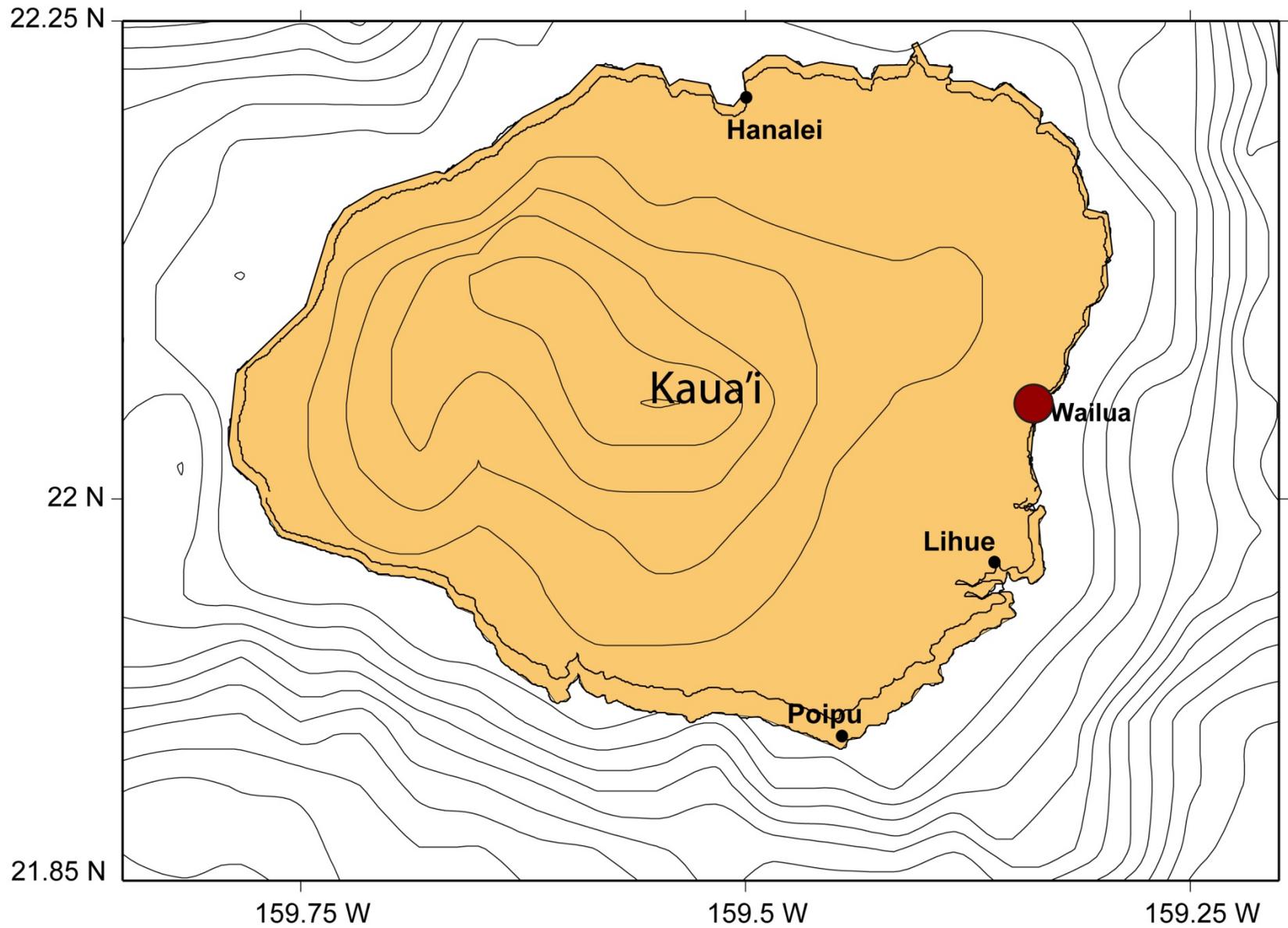
Topography lines represent 250m

GMT map created by Denise Parker JIMAR-PIFSC



Hawksbill (*Eretmochelys imbricata*) nesting locations recorded on O'ahu

PLACE NAME	LATITUDE (N)	LONGITUDE (W)	MAGNITUDE	FREQUENCY
Malaekahana	21° 39.8'	157° 56.0'	<1	Rare
Kailua	21° 24.1'	157° 44.2'	<1	Rare



Estimated number of hawkbill nesters
per year on Kaua'i

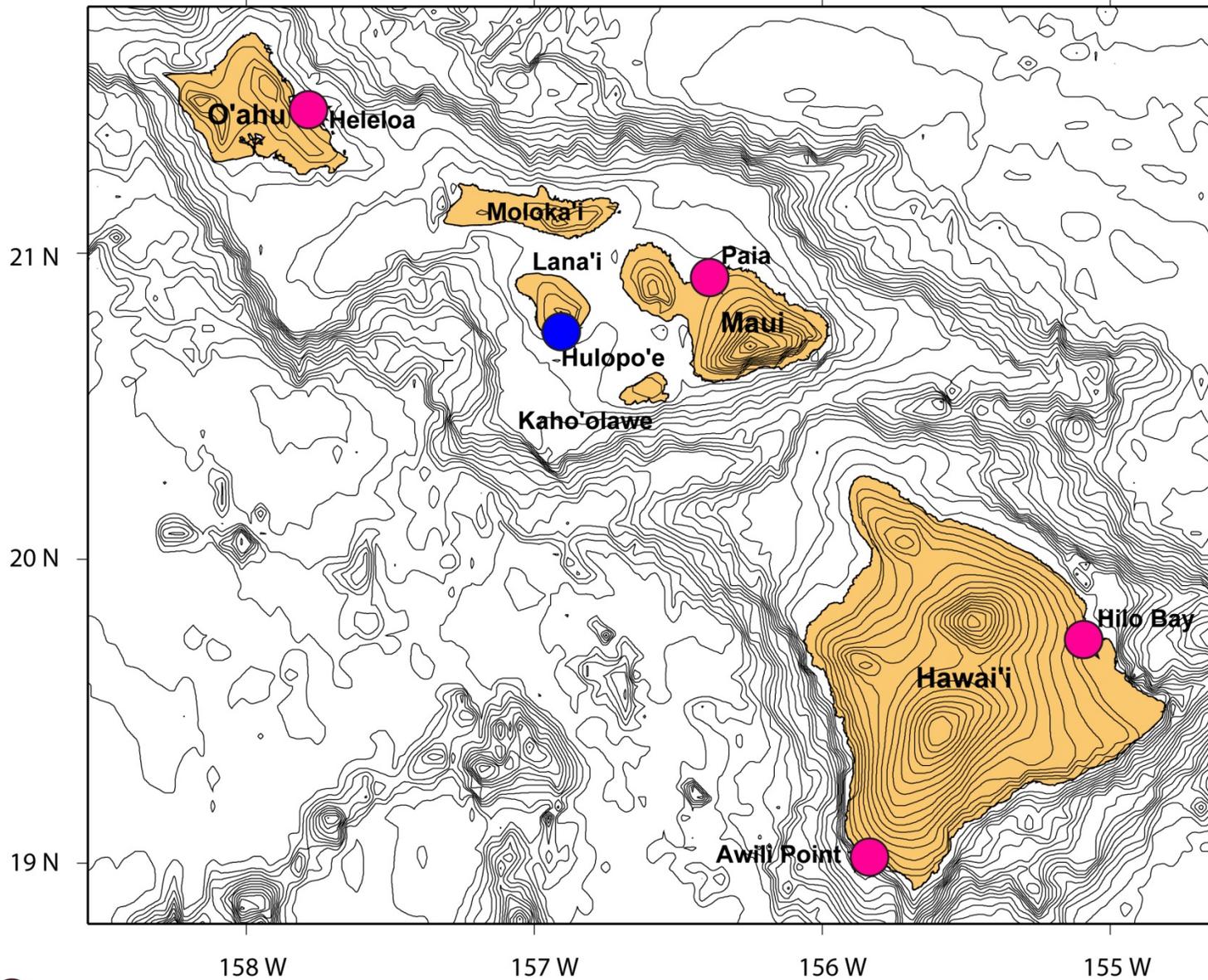
Topography lines represent 250m

GMT map created by Denise Parker JIMAR-PIFSC



Hawksbill (*Eretmochelys imbricata*) nesting locations recorded on Kaua'i

PLACE NAME	LATITUDE (N)	LONGITUDE (W)	MAGNITUDE	FREQUENCY
Wailua	22° 3.0'	159° 20.2'	<1	Unknown



<1  Olive ridley nesting locations recorded in the Hawaiian Islands

<1  Leatherback nesting location recorded in the Hawaiian Islands

GMT map created by Denise Parker JIMAR-PIFSC



Topography lines represent 500m

Olive ridley (*Lepidochelys olivacea*) and leatherback (*Dermochelys coriacea*)

nesting locations recorded in the Hawaiian Islands

PLACE NAME	LATITUDE (N)	LONGITUDE (W)	MAGNITUDE	FREQUENCY
Olive Ridley				
O'ahu				
Heleloa (Pyramid Rock)	21° 27.6'	157° 45.8'	<1	Rare
Kailua	21° 24.1'	157° 44.2'	<1	Rare
Maui				
Pa'ia	20° 54.9'	156° 23.0'	<1	Rare
Island of Hawai'i				
Hilo Bay Front	19° 23.4'	155° 4.5'	<1	Rare
Awili Point	19° 1.2'	155° 51.0'	<1	Rare
Leatherback				
Lana'i				
Hulopo'e	20° 44.3'	156° 53.6	<1	Rare