O'AHU DAY-USE MOORINGS

Table of Contents

About Day-Use Moorings	<u>) </u>	1
Mooring Diagrams		
Mooring Practices for Proper Use & Care		
Safety and Etiquette Guidelines		4

SOUTHEAST O'AHU

Fantasea Reef 1 & 2.....16

LCU Wreck......17

Hawaii Loa18

Anglers Reef19

Turtle Canyons 1 - 420

Pawaa21

Corsair Wreck 1 & 223

O'ahu Public Day-Use Mooring Guidebook

O'ahu Day-Use Moorings

WEST O'AHU

Keaau Corners/Stars	6
Land of Oz 1 & 2	7
Makaha Caverns 1 - 6	8
Big Mouth Cave/Black Rock	9
Ammo Reef 1 - 4	10

SOUTH O'AHU

Kewalo Pipe	12
Rainbow Reef/Magic Island 1 & 2	
Canyons Reef 1 - 5	14

To Report Day-Use Mooring Buoy Problems:

Contact DLNR's Division of Boating & Ocean Recreation (DOBOR) call (808) 587-1966

Fire Department		
	<u> </u>	
	I Sightings Hotline	
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	Resources (DAR)	
•	& Ocean Recreation (DOBOR)	
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	ment Hotline	,

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About Day-Use Moorings

Day-Use Moorings Rules:

Day-use moorings are for public use and available on a first-come, first-served basis and vessels are restricted to a 2.5 hour use per day, if another vessel is waiting (Chapter 13-257, Hawaii Administrative Rules). Overnight mooring is prohibited, except in case of emergency or by enforcement or rescue craft.

Anchoring by other vessels is not allowed within a hundred yards of an established mooring (Chapter 13-257, Hawaii Administrative Rules). Anchoring elsewhere in a day-use mooring zone is permitted in areas of sand, rock, or rubble bottom types where no live corals exist.

Any use of a state day-use mooring shall be at the sole risk of the owner or operator of the vessel using the mooring (Chapter 13-257, Hawaii Administrative Rules).

If mooring is missing, faulty, or damaged please report to DLNR /DOBOR (808) 587-1966.

Why Use a Day-Use Mooring?

The coral polyps that make up a coral reef are very delicate animals. Anchors and chains can have a devastating effect on corals, breaking apart in seconds what took decades to build.

Mooring buoys have proven to be an effective system around the world in reducing the damage to coral reefs caused by anchors. They eliminate the need to drop anchor on coral reefs by providing boaters with a convenient and safe means of securing their boats.

Threats to the Coral Reef

Anchoring can:

Destroy corals: Anchors and chain damage coral reefs by crushing and killing the corals they fall on.

Prevent new corals from growing: Repeated anchor drops and chain drags will break up the underlying reef (coral substrate) and prevent new corals from developing.

Scar and make corals vulnerable to disease: Anchor chains can strip the live tissue off corals, causing widespread scarring, and leaving the injured corals open to infection.

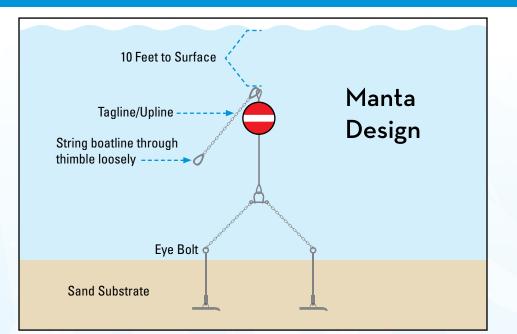
Create clouding in the water column: Anchoring can cloud the water with disturbed sediment that can choke corals and limit the amount of sunlight that corals' symbiotic algae require to make food.

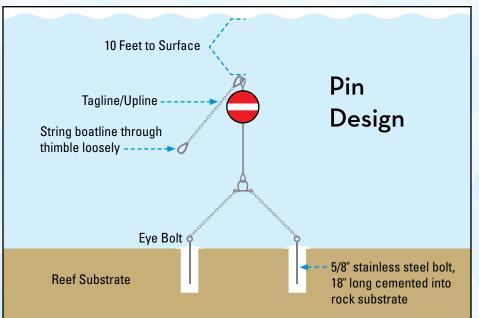
Tear up seaweed beds: Anchors and long chains destroy seaweed beds by tearing them up from sandy or soft bottom environments.

Mahalo for doing your part to help our coral reefs!

Mooring Diagrams

Mooring Practices for Proper Use & Care





In both designs above, a mooring buoy and the associated tackle is attached to eye bolt and pin. The buoy is placed about ten feet below the surface.

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Guidelines on Anchoring and Safety

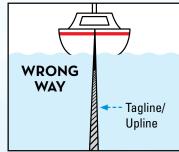
- 1) Look for a mooring rather than dropping anchor. (This mooring booklet was put together to help guide you).
- 2) Use your boat hook or have someone in the water grab the upline. Take your bowline, thread it through the upline's thimble and tie it off on your boat cleat.
- 3) Do not attach the upline directly to your cleat. That can cause the mooring to wear out faster, and depending on the size of the boat, could potentially yank the mooring out of the bottom.
- 4) Allow the threaded bowline enough slack to have some play in the swells. (Again, to avoid wear and tear to the mooring, or causing the mooring to be pulled out).
- Conduct a proper inspection of the day-use mooring before use. Send a diver down to the bottom to check the bridle, shackles, and chain to ensure mooring integrity before using.
- Larger vessels may not be safely moored during moderate to rough sea conditions.

To Minimize Maintenance:

Moorings require regular maintenance. If boat operators take the time and care to tie up properly, the amount of maintenance required on moorings can be significantly reduced. In order to keep moorings functioning well and



Boat line loops through the thimble.



Upline line tied to boat.

avoid excessive maintenance costs or labor, consider adopting the following techniques.

Always be Generous with Bowline Scope.

It is important to remember that the more scope you have, the less force and pull from the weight of the boat will actually make it all the way down to the mooring anchor point itself. More scope allows the mooring system to absorb more stress and provides a more comfortable experience for those onboard. Make sure, however, that you do not put out so much scope that your boat will be in danger of hitting the shore or other boats in the immediate area.

Avoid Tying Off in Heavy Weather or Swells.

It's better to avoid tying off to moorings in heavy weather and swells. Remember that even though moorings can be strong and durable, they are not indestructible.

Do Not Back Down on Moorings.

Continual pressure can damage, weaken or destroy a mooring. Take caution; use good seamanship skills to see how slowly and easily a vessel can tie up to a mooring. Make an extra effort as captain and crew to be gentle and treat the moorings well. Avoid being heavy-handed on your boat throttles, use seamanship skills, and be "gentle."

Mahalo for helping protect our coral reefs!

Oʻahu Public Day-Use Mooring Guidebook

Safety & Etiquette Guidelines

West Oʻahu Buoy & Mooring Locations

FOR SNORKELING, DIVING & BOATING

1) Carefully select entry and exit points to avoid areas of reef. Avoid surf zones and watch for currents.

- 2) Always have a buddy.
- **3)** Practice good fin stroke and body control to avoid accidental contact with the reef.
- 4) Practice neutral buoyancy and train others to do so.
- 5) Keep gauges, fins and other accessories from dragging on the bottom.
- 6) Respect all marine life and do not harass (chase, touch, poke, feed) them.
- 7) Observe marine life approach laws and recommended approach limits:
 - · Give sea turtles at least a 20-foot radius of approach.
 - Give monk seals at least a 100-foot radius of approach (law).
 - Give dolphins at least a 50-yard radius of approach.
 - Give whales 100-yard radius of approach (law).
- 8) Take only pictures and leave only bubbles do not collect shells or organisms.
- 9) Observe animals exhibiting their natural behaviors rather than stimulate them to entertain.
- 10) Do not feed marine life; they are fine without us and can become aggressive if fed.
- 11) Avoid grasping the coral, standing on it, or kicking up sediment.
- 12) Apply a waterproof sunscreen at least 30 minutes prior to entering the water.

Always keep your eyes on the waves.

Keep safety equipment handy - i.e. floatation, flares, and calling capabilities.

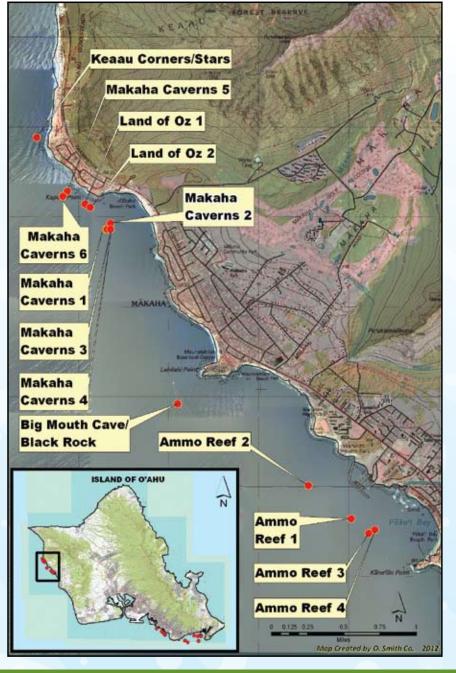
Never leave the boat unattended.

Motor outside moored boats to avoid snorkel and diver collisions.

A dive flag is to be posted if there are divers or snorkelers in the water within 50 ft. of the flag. Likewise do not motor within 50 ft. of a dive flag to avoid motoring over divers or snorkelers.

- If approaching a mooring in use, attempt radio contact with moored vessel to coordinate use of mooring, and navigate carefully should they have divers below.
- When on a mooring, have radio on at a high enough volume and tuned to channel 16, so approaching vessels can contact you.
- If approaching a vessel with a dive flag, approach slowly and carefully to avoid driving near divers' bubbles.





{ LEEWARD O'ahu }

Keaau Corners/Stars

Land of Oz 1 & 2

{ WEST (Leeward) O'AHU }

{ WEST (Leeward) O'AHU }

Description of Bearings

Keeau Corners/Stars

Latitude (GPS) – 21 29.025 N Longitude (GPS) - 158 13.935 W Mooring Depth – 45 feet Ball Depth – 15 feet Mooring Type - pin

Getting Here/Finding Mooring

This mooring is located south of Yokohama Bay, approximately 400 yards offshore of Keaau Regional Beach Park.

OWhat's Below

WEST O'AHU

This site is known for large cavern openings found throughout a lava tube that allow day light through, thus resembling "stars" towards the surface of the ocean. The depth ranges from 20-66 feet. Vertical walls can reach up to 20 feet adding to the underwater topography

of the site. This site is home to Hawaiian green sea turtles (honu), Hawaiian spiny lobster, and moray eels. Resting white tip reef sharks seeking refuge in the lava tubes have been observed. Occasionally, pods of Hawaiian spinner dolphins visit this site too.

1 Important Information

- Current is present and can change rapidly.
- The best time to dive this site is during the spring, summer, and fall months.
- During winter months this site is exposed to heavy northwest swells.
- Boat traffic not a concern, but be watchful.
- Use a mandatory dive flag.

Description of Bearings Land of Oz 1

Latitude (GPS) - 21 28.623 N Longitude (GPS) - 158 13.627 W Mooring Depth – 40 feet Ball Depth - 15 feet (moved and/or lowered during winter months) Mooring Type - pin

Land of Oz 2

Latitude (GPS) - 21 28.603 N Longitude (GPS) - 158 13.593 W Mooring Depth – 40 Ball Depth - 15 feet (moved/lowered to deeper waters during winter months) Mooring Type – pin

Getting Here/Finding Mooring

These moorings are located off the north end of Makaha Beach Park and Makaha surfing beach. These moorings are located near the Makaha Caverns Moorings (see page 8).

Solution What's Below

Great night dive site plentiful with nudibranchs, pipefish, octopi, and Hawaiian green sea turtles (honu). Occasionally spotted eagle rays swim by.

1 Important Information

- Current is present and can change rapidly.
- The best time to dive this site is during the spring, summer, and fall months.
- During winter months the site is exposed to heavy northwest swells.
- Boat traffic not a concern, but be watchful.
- Use a mandatory dive flag.



Flameback coral shrimp



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Makaha Caverns 1 - 6

Big Mouth Cave/Black Rock

{ WEST (Leeward) O'AHU }

Description of Bearings

Makaha Caverns 1

Latitude (GPS) – 21 28.491 N Longitude (GPS) – 158 13.471 W Mooring Depth – 45 feet Ball Depth – 15 feet (moved and/or lowered during winter months) Mooring Type – pin

Makaha Caverns 2

Latitude (GPS) – 21 28.506 N Longitude (GPS) – 158 13.464 W Mooring Depth – 45 feet Ball Depth – 15 feet (moved and/or lowered during winter months) Mooring Type – pin

Makaha Caverns 3

WEST O'AHU

Latitude (GPS) – 21 28.470 N Longitude (GPS) – 158 13.484 W Mooring Depth – 45 feet Ball Depth – 15 feet (moved and/or lowered during winter months) Mooring Type – pin

Makaha Caverns 4

Latitude (GPS) – 21 28.470 N Longitude (GPS) – 158 13.650 W Mooring Depth – 45 feet Ball Depth – 15 feet (moved and/or lowered during winter months) Mooring Type – pin

Makaha Caverns 5

Latitude (GPS) – 21 28.700 N Longitude (GPS) – 158 13.740 W Mooring Depth – 45 feet Ball Depth – 15 feet (moved and/or lowered during winter months) Mooring Type – pin

Makaha Caverns 6

Latitude (GPS) – 21 28.670 N Longitude (GPS) – 158 13.770 W Mooring Depth – 45 feet Ball Depth – 15 feet (moved and/or lowered during winter months) Mooring Type – pin

{ WEST (Leeward) O'AHU }

Getting Here/Finding Mooring

These moorings are located offshore of the north end of Makaha surfing beach, 100 yards off of Kepuhi Point.

SWhat's Below

Makaha Caverns is home to six different moorings. Underwater, Makaha Caverns is formed by many V-shaped interlaced open lava tubes. All dives offer depths from 20-50 feet. There are numerous lava caverns to explore that are home to many types of nocturnal reef fish and invertebrates. Divers can explore collapsed lava tubes and swim through arches and canyons. Unique frogfish, titan scorpion fish, pipefish, conger eels, moral eels, octopus, as well and large white tip reef sharks are found inside the caverns.

1 Important Information

- This site is a seasonal site; buoys are removed/lowered during winter months.
- Current is present and can change rapidly.
- The best time to dive this site is during the spring, summer and fall months.
- During winter months the site is exposed to heavy northwest swells.
- Be watchful of boat traffic.
- Use a mandatory dive flag.
- Caution advised while swimming through tunnels when there is a swell.

Description of Bearings

Big Mouth Cave/Black Rock Latitude (GPS) – 21 27.415 N Longitude (GPS) –158 13.038 W Mooring Depth – 55 feet Ball Depth – 15 feet Mooring Type – pin

Getting Here/Finding Mooring

This mooring is located offshore of Lahilahi Point, north of Waianae.

Selow

A wall dive ranging in depth from 40-90 feet with a cavern at the bottom that opens on three sides. Moral eels, octopus, frogfish, nocturnal reef fish, orange cup coral, and resting white tip reef sharks are common inhabitants of the cave. Also keep an eye out for both manta rays and sting rays.

1 Important Information

- The best time to dive this site is during the spring, summer, and fall months.
- During winter months the site is exposed to heavy northwest swells.
- Try to avoid kicking up sand substrate inside the cavern.
- Be watchful of boat traffic.
- Use a mandatory dive flag.
- Site is considered an advanced dive site because of strong current.



White Tip Reef Shark • mano lala kea

Ammo Reef 1 - 4

South Oʻahu Buoy & Mooring Locations

{ WAI<u>KIKI }</u>

Description of Bearings Ammo Reef 1

Latitude (GPS) – 21 26.717 N Longitude (GPS) – 158 11.924 W Mooring Depth – 45 feet Ball Depth –15 feet Mooring Type – pin

Ammo Reef 2

Latitude (GPS) – 21 26.920 N Longitude (GPS) – 158 12.200 W Mooring Depth – 45 feet Ball Depth – 15 feet Mooring Type – pin

Ammo Reef 3

Latitude (GPS) – 21 26.629 N Longitude (GPS) – 158 11.813 W Mooring Depth – 45 feet Ball Depth – 15 feet Mooring Type – pin

WEST O'AHU

Latitude (GPS) – 21 26.650 N

Longitude (GPS) – 158 11.773 W Mooring Depth – 45 feet Ball Depth – 15 feet Mooring Type – pin

Getting Here/Finding Mooring In front of Waianae Small Boat Harbor.

Solution What's Below

Canyons running throughout with 10-foot deep ledges to explore. Small coral heads offer shelter for families of domino damselfish. Occasionally, a Hawaiian green sea turtle (honu) will swim by.

1 Important Information

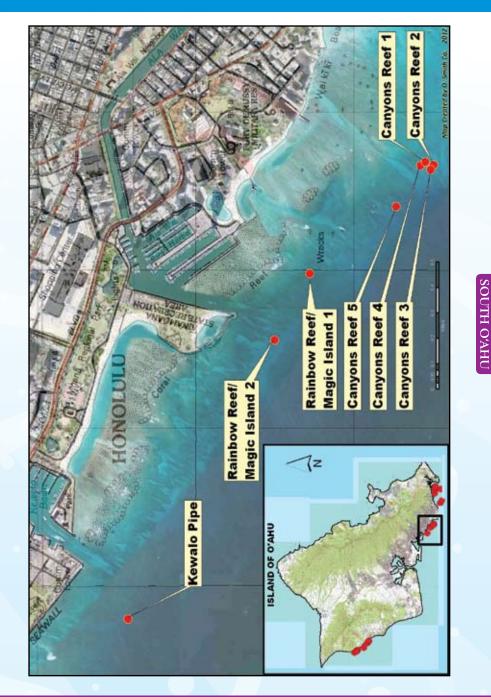
 There is potential to find live unexploded ordnance—do not touch or disturb substrate. • Contact officials immediately if any ordnance is found.

{ WEST (Leeward) O'AHU }

- Popular spot so there is boat traffic.
- Use a mandatory dive flag.



Hawaiian Dascyllus/Hawaiian Domino Damselfish • 'alo 'ilo'i • {Endemic}



<u>Kewalo Pipe</u>

Rainbow Reef/Magic Island 1 & 2

{ SOUTH O'AHU - Waikiki}

Description of Bearings Kewalo Pipe

Latitude (GPS) – 21 17.270 N Longitude (GPS) – 157 51.870 W Mooring Depth – 35 feet Ball Depth – 11 feet Mooring Type – pin

Getting Here/Finding Mooring

This popular shore dive is located approximately 1/8 mile southwest of the Kewalo Basin Boat Harbor channel.

SWhat's Below

Kewalo Pipe is named after the 48" retired drain pipe that leads from shore seaward 400 yards. Depths range from 20-70 feet. The pipe itself provides shelter to a myriad of species including crabs, lobster, frog fish, and a selection of moray eels. In addition, the nearby reefs on either side of the pipe offer fish viewing areas.

{ SOUTH O'AHU - Waikiki}

1 Important Information

- Boat traffic is very busy since it is next to the boat channel of Kewalo Basin.
- All south facing sites are affected by south swell, more often in the summer months.
- Currents are often strong during tide changes.
- Use a mandatory dive flag.

Description of Bearings Rainbow Reef/Magic Island 1

Latitude (GPS) – 21 16.747 N Longitude (GPS) – 157 50.367 W Mooring Depth – 35 feet Ball Depth – 15 feet Mooring Type – pin

Rainbow Reef/Magic Island 2

Latitude (GPS) – 21 16.761 N Longitude (GPS) – 157 50.852 W Mooring Depth – 35 feet Ball Depth – 15 feet Mooring Type – pin

Getting Here/Finding Mooring

These moorings can be found from the shoreline of Magic Island (west end of Waikiki, in front of Hilton Hawaiian Village), which is between Kewalo Basin Boat Harbor and Ala Wai Boat Harbor, Waikiki.

SWhat's Below

Rainbow Reef is a lava flow reef terminating into sand offshore (west). The depth is 25-45 feet. A large variety of reef fish inhabit this site as well as Hawaiian green sea turtles (honu). Octopus and moray eels are also plentiful.

1 Important Information

- All south-facing sites are affected by south swell, more often in the summer months.
- Be aware of heavy boat traffic due to close proximity of the busy Ala Wai Boat Harbor channel.
- In the summer months this site can have turbidity from wave action.
- Use a mandatory dive flag.



Orange Cup Coral



Threadfin Butterflyfish • kikākapu

13

SOUTH O'AHU

Canyons Reef 1 - 5

Southeast Oʻahu Buoy & Mooring Locations

{ SOUTH O'AHU - Waikiki}

{ NUI VALLEY - HAWAII KAI }

Description of Bearings

Canyons Reef 1 Latitude (GPS) – 21 16.256 N Longitude (GPS) – 157 50.218 W Mooring Depth – 40 feet Ball Depth – 15 feet Mooring Type – manta

Canyons Reef 2

Latitude (GPS) – 21 16.240 N Longitude (GPS) – 157 50.205 W Mooring Depth – 40 feet Ball Depth – 15 feet Mooring Type – manta

Canyons Reef 3

Latitude (GPS) – 21 16.211 N Longitude (GPS) – 157 50.216 W Mooring Depth – 40 feet Ball Depth – 15 feet Mooring Type – manta

Canyons Reef 4

Latitude (GPS) – 21 16.221 N Longitude (GPS) – 157 50.233 W Mooring Depth – 40 feet Ball Depth – 15 feet Mooring Type – manta

Canyons Reef 5

Latitude (GPS) – 21 16.341 N Longitude (GPS) – 157 50.368 W Mooring Depth – 40 feet Ball Depth – 15 feet Mooring Type – manta Getting Here/Finding Mooring

These moorings are located a 1/2 mile east of the Ala Wai Boat Harbor Channel buoys.

SWhat's Below

A series of five moorings are located on lava reefs terminating into sandy seafloor substrate. The maximum depth is 40 feet at the end of the reef. A large variety of reef fish populate these sites as well as Hawaiian green sea turtles (honu) and large schools of black durgeon triggerfish.

1 Important Information

- All south-facing sites are affected by south swell, more often in the summer months.
- Heavy boat traffic can be present due to close proximity of Waikiki beach activities.
 Use a mandatory dive flag.



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Convict Tang • manini



LCU Wreck

Description of Bearings

Fantasea Reef 1 (East)

Latitude (GPS) – 21 15.272 N Longitude (GPS) – 157 46.388 W Mooring Depth – 47 feet Ball Depth – 10 feet Mooring Type – pin

Fantasea Reef 2 (West)

Latitude (GPS) – 21 15.260 N Longitude (GPS) – 157 46.424 W Mooring Depth – 52 feet Ball Depth – 8 feet Mooring Type – pin

Getting Here/Finding Mooring

These moorings are located three miles southwest of Hawaii Kai number one channel marker in Maunalua Bay, directly in front of the Kahala Hotel and Resort.

SWhat's Below

Fantasea Reef is named for the plentiful coral and lava formations that resemble a fantasy underwater land. Large Hawaiian green sea turtles (honu) can be found throughout swimthrough tunnels and arches. Depths range from 40-55 feet. This site covers quite a large area, 100 yards long (east to west) by 50 yards wide (north to south).

{ SOUTHEAST O'AHU }

1 Important Information

- All south-facing sites are affected by south swell, more often in the summer months.
- Currents are often strong during tide changes.
- Incoming tide, current will trend towards Diamond Head.
- Outgoing tide, the trend is towards Koko Head.
- Use a mandatory dive flag.

Description of Bearings LCU Wreck

Latitude (GPS) – 21 14.991 N Longitude (GPS) – 157 45.842 W Mooring Depth – 85 feet Ball Depth – 10 feet Mooring Type – pin

Getting Here/Finding Mooring

This mooring is three miles southwest from the number one channel marker of Maunalua Bay boat channel.

Solution What's Below

This site is home to the final resting place of a Landing Craft Utility (LCU) vessel that was sunk by the State of Hawaii as part of an artificial reef project. The LCU vessel sank upside down in 85 feet of water. It provides a cavelike habitat for nocturnal fish species such as

soldierfish. There is also concrete "Z" blocks scattered along the bottom to offer more reef habitat for sea creatures to call home.

1 Important Information

- Boat traffic usually not a problem, but be watchful.
- All south-facing sites are affected by south swell, more often in the summer months.
- · Currents are often strong during tide changes.
- Incoming tide, current will trend towards Diamond Head.
- During outgoing tide, the trend is towards Koko Head.
- Use a mandatory dive flag.



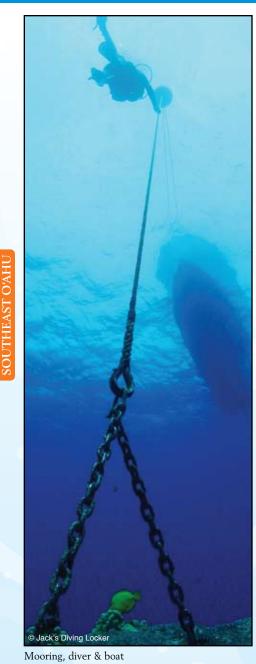
Divers using Day-Use Moorings



Soldierfish school

SOUTHEAST O'AHU

O'ahu Public Day-Use Mooring Guidebook



Description of Bearings

{ SOUTHEAST O'AHU - Nui Valley }

Hawaii Loa Latitude (GPS) – 21 16.237 N Longitude (GPS) – 157 44.688 W Mooring Depth – 28 feet Ball Depth – 10 feet Mooring Type – pin

Getting Here/Finding Mooring

Hawaii Loa Crater is located off Hawaii Loa Ridge in depths of 35-45 feet. Leaving Maunalua Bay Boat Ramp/Koko Marina, the mooring is two miles towards Diamond Head from number one channel marker.

SWhat's Below

Hawaii Loa mooring is a circular crater with collapsed ledges that offer a robust fish and sea turtle environment. There are abundant coral growths on the outer slopes of the crater that generations of domino damselfish call home.

1 Important Information

- All south-facing sites are affected by south swell, more often in the summer months.
- Current can be strong at times.
- Boat traffic usually not a problem, but be watchful.
- Use a mandatory dive flag.

Description of Bearings

Anglers Reef Latitude (GPS) – 21 16.149 N Longitude (GPS) – 157 44.016 W Mooring Depth – 40 feet Ball Depth – 10 feet Mooring Type – pin

Getting Here/Finding Mooring

This mooring is located approximately two miles southwest of Hawaii Kai number one channel marker in Maunalua Bay, off Niu Valley.

Swhat's Below

A long drop-off ledge that extends 200 yards wast to west in 40 feet of water. The ledge provides excellent moray eel and frogfish cover and the rocky rubble near the shore side of the site provides opportunities for octopus sightings. Eagle rays may also be encountered as they pass through the area.

1 Important Information

- Boat traffic usually not a problem, but be watchful.
- All south-facing sites are affected by south swell, more often in the summer months.
- Currents are often strong during tide changes.
- General rule: Incoming tide, current will trend towards Diamond Head.
- Outgoing tide, the trend is towards Koko Head.
- Use a mandatory dive flag.



Zebra Moray • *puhi*

18

<u> Turtle Canyons 1 - 4</u>

Pawaa

{ SOUTHEAST O'AHU - Hawaii Kai }

Description of Bearings

Turtle Canyons 1

Latitude (GPS) – N 21.16.341 N Longitude (GPS) – 157 43.500 W Mooring Depth – 30 feet Ball Depth – 10 feet Mooring Type – pin

Turtle Canyons 2 (East)

Latitude (GPS) – 21 16.290 N Longitude (GPS) – 157 43.530 W Mooring Depth – 32 feet Ball Depth – 8 feet Mooring Type – pin

Turtle Canyons 3 (Middle)

Latitude (GPS) – 21 16.311 N Longitude (GPS) – 157 43.539 W Mooring Depth – 31 feet Ball Depth – 8 feet Mooring Type – pin

Turtle Canyons 4 (West) Latitude (GPS) – 21 16.318 N

Longitude (GPS) – 157 43.601 W Mooring Depth – 32 feet Ball Depth – 10 feet Mooring Type – pin

Getting Here/Finding Mooring

Turtle Canyons moorings are located 1/2 mile west of the number one channel marker of the Hawaii Kai boat channel (Maunalua Bay). They can be found 200 yards from east to west and 100 yards from the surf line (north to south).

Swhat's Below

These moorings are placed on a lava flow reef terminating in sand offshore (south). The maximum depth is 35 feet in the sand at the end of the reef. As the name suggests, this area is home to a large population of Hawaiian green sea turtles (honu). Large schools of black durgeon triggerfish greet divers on each dive. Octopus and moray eels are also plentiful. This is one of the few locations that crocodile eels have been sighted. Look for these rare eels burrowing in the sand.

{ SOUTHEAST O'AHU - Hawaii Kai }

1 Important Information

- All south-facing sites are affected by south swell, more often in the summer months.
- This site may have heavy boat traffic due to close proximity to a busy boat channel.
- Use a mandatory dive flag.



Hawaiian Green Sea Turtle • honu

Description of Bearings Pawaa

Latitude (GPS) – 21 16.178 N Longitude (GPS) – 157 43.567 W Mooring Depth – 32 feet Ball Depth – 15 feet Mooring Type – pin

Getting Here/Finding Mooring

This mooring is located off shore of Maunalua Bay on the outside edge of Koko Craters moorings (see page 22).

Swhat's Below

This reef is teeming with Hawaiian green sea turtles (honu), both resting and being cleaned at one of the many cleaning stations. A series of lava fingers extend to and from shore that is prime habitat for octopus and eels hiding in the reef crevices. Above the reef divers will encounter schools of reef fish.

1 Important Information

- Boat traffic usually not a problem, but be watchful.
- All south-facing sites are affected by south swell, more often in the summer months.
- Currents are often strong during tide changes.
- Incoming tide, current will trend towards Diamond Head.
- Outgoing tide, the trend is towards Koko Head.
- Use a mandatory dive flag.



Moorish Idol • *kihikiki*

SOUTHEAST O'AHU

Koko Craters 1 - 5

Corsair WWII Fighter Plane 1 & 2

{ SOUTHEAST O'AHU - Hawaii Kai }

{ SOUTHEAST O'AHU - Hawaii Kai }

Description of Bearings

Koko Craters 1

Latitude (GPS) – N 21.16.201 N Longitude (GPS) – 157 43.403 W Mooring Depth – 31 feet Ball Depth – 15 feet Mooring Type – pin

Koko Craters 2

Latitude (GPS) – 21 16.168 N Longitude (GPS) – 157 43.420 W Mooring Depth – 30 feet Ball Depth – 15 feet Mooring Type – pin

Koko Craters 3 (Back)

Latitude (GPS) – 21 16.165 N Longitude (GPS) – 157 43.423 W Mooring Depth – 33 feet Ball Depth – 10 feet

Koko Craters 4 (Sand)

SOUTHEAST O'AHU

Latitude (GPS) – 21 16.190 N Longitude (GPS) – 157 43.371 W Mooring Depth – 30 feet Ball Depth – 10 feet Mooring Type – pin

Koko Craters 5 (Secret)

Latitude (GPS) – 21 16.234 N Longitude (GPS) – 157 43.410 W Mooring Depth – 32 feet Ball Depth – 10 feet Mooring Type – pin

Getting Here/Finding Mooring

From Koko Marina or Hawaii Kai Public Boat Ramp, Koko Craters is approximately 1/4 mile southwest from the number one channel marker.

Swhat's Below

Craters to be explored are visible from the surface of the water. Koko Craters offers divers a series of craters or depressions in a mostly flat sandy hard substrate. These depressions have rock ledges that countless marine creatures call home. The craters are a popular site to see Hawaiian green sea turtles (honu) resting and getting their shells cleaned by the local fish population. Also good dive sites to witness sergeant majors laying eggs and moray eels hiding in the reef. At one of the moorings there is a Buddha statue that was left by a commercial operation used for photo opportunities.

1 Important Information

- Site can be rough when there are strong trade winds.
- Current can be strong during full and new moon.
- Incoming tide, current will trend towards Diamond Head.
- Outgoing tide, the trend is towards Koko Head.
- Subject to south swells near boat channel, be cautious of heavy boat traffic.
- Use a mandatory dive flag.



Milletseed Butterflyfish • {Endemic}

Description of Bearings

Corsair WWII Fighter Plane 1* Latitude (GPS) – 21 15.271 N Longitude (GPS) – 157 43.844 W Mooring Depth – 107 Ball Depth – 15 feet Mooring Type – manta

Corsair WWII Fighter Plane 2*

Latitude (GPS) – 21 15.271 N Longitude (GPS) – 157 43.844 W Mooring Depth – 107 feet Ball Depth – 15 feet Mooring Type – manta

Getting Here/Finding Mooring

These moorings are located two miles south from the number one channel marker of Maunalua Bay boat channel, Hawaii Kai.

*(At the time of publishing both Corsair 1 and 2 moorings were not installed, however are planned to be installed soon)

Swhat's Below

This is one of the deepest dives on O'ahu. This site is home to two moorings that mark the location of a WWII F-4 Corsair Fighter plane that sank in 107 feet of water after the pilot ran out of fuel. According to historical records, the pilot did survive after swimming to shore. The plane is still intact, but it is showing signs of decay. Many rare nocturnal sea creatures have made use of the intact wings and fuselage, including the Hawaiian spiny lobster and moray eels. The surrounding sand substrate near the sunken plane is home to a garden of thousands of rare Hawaiian garden eels.

1 Important Information

- The Corsair WWII Fighter Plane is an important historical site and is protected by law.
- Please do not disturb the plane or surrounding substrate.
- Boat traffic usually not a problem, but be watchful.
- All south-facing sites are affected by south swell, more often in the summer months.
- Currents are often strong during tide changes.
- Incoming tide, current will trend towards Diamond Head.
- Outgoing tide, the trend is towards Koko Head.



Hawaiian Garden Eels • puhi • {Endemic}

Acknowledgements

<u>How You Can Help</u>



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O'ahu Public Day-Use Mooring Guidebook

The Hawaii Day-Use Mooring Buoy system is made possible by contributions from people like you! Your donations are needed to install and maintain the day-use mooring buoys in Hawaii. The maintenance and expansion of Hawaii's public Day-Use Mooring Buoy system depends on private donations and volunteer assistance.

The Malama Kai Foundation is a 501(c)(3) organization with a mission to conserve Hawaii's coastal and marine resources through community action, education, and outreach. The Day-Use Mooring Buoy system has been a primary focus of the Malama Kai Foundation since it was founded in 1991. Malama Kai Foundation is responsible for coordinating the installation and maintenance of the day-use mooring buoys statewide (except Molokini).

Malama Kai Foundation is a non-profit organization dedicated to ocean stewardship for current and future generations through community service and public education. We rely on your support to keep our message going and appreciate any donation amount you can give and will put it to good work.

Our donation system is processed through PayPal and 100% secure

Donations can be made to Malama Kai Foundation using our safe and secure paypal system on the website to support the Day-Use Mooring Buoy system statewide, by island, or special project (see www.malama-kai.org).

Your contribution to Malama Kai Foundation is tax deductible (IRS Tax ID #99-0285490) to the extent allowable by law.

The public Day-Use Mooring Buoy system would not exist without the help of dedicated individuals and businesses. Numerous dive shops around the state collaborate with Malama Kai to install, monitor and maintain the buoys. Please show your support for the public Day-Use Mooring Buoy program by patronizing these dedicated businesses.

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Mahalo!



Day-Use Mooring Buoy





...for helping protect our coral reefs!