# INCREASED FISHING EFFICIENCY

Side setting may allow you to get more baited hooks set to catch more tuna and swordfish than conventional stern setting or using blue-dyed bait.

When, side setting:

- \* Birds take fewer baits from hooks
- \* The hook setting rate is slightly faster, so you may be able to get more gear in the water.

# **BIRD AVOIDANCE EFFECTIVENESS**

Of the numerous seabird avoidance methods that have undergone scientific assessment, side setting is one of the most effective.

A short-term study conducted in Hawai'i in 2003 found that side setting nearly eliminated bird capture compared to using blue-dyed bait or an underwater setting chute.





#### WHO'S DOING IT

The following vessels in the Hawai'i longline fleet have voluntarily switched from conventional stern setting to side setting as of January 2005. We appreciate their input on the practicality of side setting as a seabird mitigation method.

F/V Amanda K,

Captain Richard Robertson F/V Black Magic, Captain Brian Aasted F/V Caroleigh, Captain Craig Yeakel F/V Cumberland Trail, Captain Leland Oldenburg F/V Excalibur, Captain Jack Sanford F/V Kaimi, Captain Jack Sanford F/V Katy Mary, Captain Jerry Ray F/V Tucana, Captain Roger Weaver F/V Debbie Sue, Captain David Fee F/V Marie M, Captain John Myking





Pacific Islands Regional Office Sustainable Fisheries Division

# Let's Avoid Catching Seabirds in Our Fisheries





Side Setting for Longliners as a Practical Option

## HOW TO SIDE SET

Side setting means setting longline gear off the side of the vessel rather than off the conventional position at the stern. Baited hooks are set close to the side of the vessel where seabirds, such as albatrosses, can't pursue them. Ideally, by the time the stern passes, the hook has sunk beyond the reach of seabirds.

#### SIDE SETTING TIPS:

\* Use 60 g weighted swivels within 1 m of the hook.

\* Set as far forward as possible to maximize the time for hooks to sink beyond the reach of seabirds.

This also makes it easier to deal with tote tangles and badly thrown baits.

The few vessels that may be prevented from setting far forward need to mount their main line shooter at least 0.5 m from the stern corner to allow space for a bird curtain.

\* Throw baited hooks as far forward and as close to the hull as possible.
\* Clip branch lines to the main line the moment that the vessel passes the baited hook. Tension in the branch line is minimized and keeps the baited hook from being pulled towards the surface where birds can reach it.

\* Use a bird curtain between the setting position and the stern to prevent birds from establishing a flight path where hooks are set.

#### **OPERATIONAL BENEFITS**

Side setting provides large operational benefits, especially for vessels with an aft wheelhouse and main work deck forward of the wheelhouse.

#### \* Increases Safety and Efficiency:

Side setting allows the captain to better supervise fishing operations from the bridge.

\* Saves Space:

Side setting allows for gear to be stored in a much smaller area, freeing up valuable deck space, even on vessels with a forward wheelhouse. Instead of having two separate work areas, at the stern for line setting and at mid-ship for line hauling, side setting requires only a single work area where all gear can be stored.

## \* Practical for Crew:

Side setting eliminates the need to move gear. Vessels conventionally setting from the stern move totes, buoys, and radio beacons between the mid-ship hauling position and the stern setting position and also must move large quantities of bait.

\* Facilitates Emergency Maneuvering: Emergency maneuvering when a main line jams during setting is more effective when line setting from mid-ship on the starboard side.

# GEAR TANGLING IN THE PROP

Most captains are concerned that side setting will cause gear to get fouled in the propeller. Researchers have set from various port and starboard positions in various sea conditions and taken abrupt turning maneuvers in an attempt to foul the gear while side setting, and found that side setting did not result in gear tangling, even when the captain tried his best to foul the gear. This has been confirmed by several vessels in the Hawai'i fleet who are now side setting.

# PORT SIDE SETTING

Side setting from the port side is more convenient than from the starboard side if you haul from the starboard side, which is the case for most of the Hawai'i fleet:

- \* A fixed position main line shooter will not interfere with line hauling at the conventional starboard position when port side setting.
- \* It is a more natural throwing motion for right-handed crew to set from the port side.
- \* Main line shooters have motors on their left side, making it more convenient to clip branch lines to the main line when port side setting.



Port Side Setting

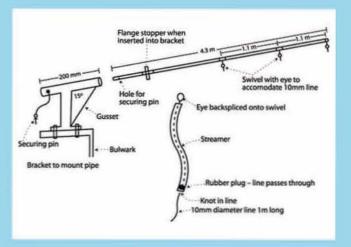
## STARBOARD SIDE SETTING

A vessel's layout may make it impossible to set from the port side, or it may be possible to set further forward from the starboard side. When setting from the starboard side, use a main line shooter motor and mounting plate that accommodates right side mounting.



Starboard Side Setting





Bird curtain pole, streamers, and mounting bracket used when side setting. Three streamers of 20 mm diameter garden hose are attached to three swivels. The hose hangs 20 cm above the sea surface with 10 mm diameter line protruding about 1 m from the end of the hose to drag along the sea surface.