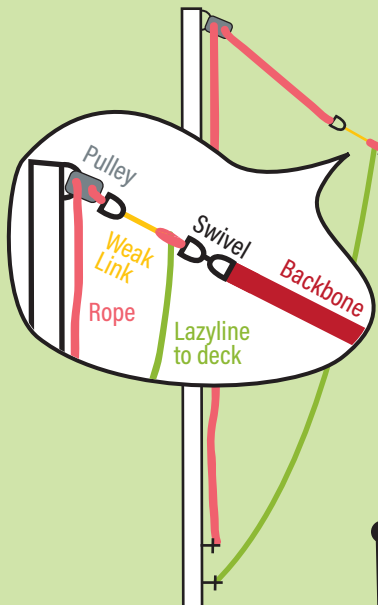


Vessel Attachment

Attached to the vessel at least 5m (recommended at 7m+) above the surface of the sea in calm conditions, and as close to the stern as practically possible.



Streamer Aerial Section

Lightweight to improve aerial extent, but durable, at least 60m+ in length (plus your drag section). The aerial extent section must achieve a minimum aerial extent of 50m when fishing high risk periods (not including the drag section):

- High risk period: all day light hours and for three days either side of the full moon.

Each Streamer must reach the sea surface, streamers must be spaced at a maximum of 5 metre intervals along the full aerial extent of the line.

Streamers must be brightly coloured and may be shortened along the first 15 metres however streamers must be maintained at a minimum length of one metre.

Minimum 5m (Ideally 7m+)

max 15m

max 5m

This section is often in/out of water. Streamers in this section should be of a material and length that is less likely to tangle with the setting gear and/or birds.

Drag Section

For vessels with Auto baiting machines and those 20m or greater, the tori line must be a minimum of 150m in length.

There needs to be enough drag to maintain a minimum of 50m of aerial extent during high risk periods.

Braided rope or mono is best attached to a drag object like a float or cone or larger diameter rope.

The drag material or 'object' needs to be designed and constructed to reduce entanglement with setting line i.e. stream-line and seamless construction.

The join between the backbone and drag rope is a "catch point", ensure its streamlined, whip/tuck and wrap this join.

Drag "rope" section or float/cone etc

Setting

Long Line

Recommended Streamer Materials:

- Bright coloured rubber or plastic tubing
- Rigid, stiff tape or cord connected in a manner to reduce tangling with other streamers and the backbone

BLL Tori Line Design and Build – Guiding Principles (vessels greater than 7m)

Use the tori line design guide diagram (over page) as a starting point to construct something that works for your vessel design and fishing practices.

A well-designed and deployed tori line reduces risk of seabird captures but only if it is used in conjunction with an effective sink rate.

Tori lines need to protect the sinking hooks, lines must be weighted in order to achieve at least a five metre depth within the aerial extent of the tori line.

Tori lines (streamer lines) must be used on BLL vessels 7m or greater in overall length for all sets (vessels Dahn lining are not required to use tori lines).

The streamer line must achieve a minimum aerial extent of 50 metres when fishing during high risk periods; High risk periods are all day light sets and during a full moon and three days either side of a full moon.

All autoliners and BLL vessels 20m or greater in overall length, must have a tori line that is a minimum of 150m in length.

To maximise performance, the tori line needs to be:

1. Well-constructed, light weight but durable, easy to deploy and retrieve. It should leave the vessel as high as possible and have plenty of drag. You will need spare parts and should have a spare line set up and ready to deploy if a major tangle or breakage occurs..
2. The key to reducing tangling issues – sink your gear to a required depth before the tori line reaches the water surface, be able to adjust or move the tori line to protect baited hooks with a bridle etc to suit the changing conditions. Keep all the streamers in the air not lying in the water and the drag in-water section needs to be streamlined to reduce the risk of tangling.

Three Main Sections of a Tori line:

Vessel Attachment – This height is crucial in order to increase aerial extent

- **Height:** You are required to suspend the tori line from a point on the vessel at least 5m above the surface of the water and as close to the stern as possible. Ideally it should leave the stern at around 7m+ above the waterline. If necessary, fit a pole to get extra height (for every 1m of extra height above 5m you'll achieve about 7m more aerial extent).
- **Weak link/ breakaway system:** fit a weak link at the attachment point so that the tori line will break off at your weak link, or before the tori line 'spools off' your gear. Use a lazy line back to the deck so that you can regain control of the vessel end of the tori line if/when it breaks. If the tori line breaks or is lost, you need to redeploy another before setting any further gear.

Aerial Streamer section – Suitable materials make a difference

- **Backbone:** This is the main part of the tori line which supports the streamers, the aerial extent 'backbone section' needs to be at least 50m to 60m long from the stern and you need to maintain a minimum 50m in the air, when fishing during high risk periods. Choose a material that is light-weight, durable and braided as it twists less.
- **Streamer materials:** Must be brightly coloured, suitable/durable, rigid, stiff, strong materials such as rubber tubing, tape, or cord, attached in a way that prevents streamers from wrapping around the backbone and tangling with each other
- **Streamer placement:** Must have streamers fitted at maximum of 5m intervals, along the aerial extent section, beginning not more than 5m from the stern of the vessel.
- **Streamers may be shortened:** along the first 15m of the streamer line to reduce tangling with the setting hooks as long as these are not shorter than 1m. The rest of the streamers need to reach down near the water surface (in calm conditions) along the aerial extent.
- **Do a test deployment:** Trim each longer streamer to suit your deployment height. In calm conditions the streamers must reach down close to the surface, but ensure most of the time they are in the air and not the water (streamers in water are more likely to tangle with setting hook line, reduce aerial extent and can even tangle birds)

Drag Section - Drag section is crucial in order to increase aerial extent

- **Drag object:** A length of rope (braided rope materials twist less) or mono or an object like a cone or float, (or a combination of both) fitted to the end of the aerial streamer section. It needs to provide enough drag to maintain the streamer section to the required 50m aerial extent during high risk periods.
- To achieve 50m to 60m plus of aerial extent Sea-trials have shown a tori line deployed from a height of:
 - 5m to 6m (at around 5kn) requires about 30m to 50m of 9mm braid (500L) with either gill net-floats placed every few metres on the drag rope and a small road cone or buoy etc at the end to act as a drogue.
 - 8m to 10m, (at around 3kn to 4kn), required about 60+m of 9mm braid (500L) plus a short length of mooring rope or road cone or a float etc at the end to act as a drogue.

For more advice: Contact your local BLL Liaison Officer, listed in your Protected Species Risk Management Plan

Disclaimer:

This document has been produced to serve as a guide to the MPI Fisheries Regulations for Seabird Mitigation Measures Bottom Longlines, for use by the fishing industry. This is not intended to be nor should it be used, as a substitute to any statutory, regulatory, and/or non-regulatory requirements for Bottom Longline fishing. Before acting in reliance, either wholly or partially, on any information contained in this document 'guide/design', readers should seek advice as to how current legislation, rules and regulations may affect their interests. It is the duty of the operator to know and understand the current Regulations that apply.