

7.1 Weather Conditions

Smaller fishing vessels are put in danger when caught in extremely bad weather.

A large proportion of accidents involving small vessels are weather related. Bad weather makes the work environment onboard the vessel extremely hazardous. It also places a lot of strain on the vessel's structure and equipment.

It is important to respect the weather at sea. Vessel operators should always know and understand what the weather is forecast to do.

Marine weather information

Marine weather forecasts state what the weather is expected to do. This is done using series of measures as follows:

Wave height

Wave height used in forecasts refers to the waves that are generated by the wind in the area that is being reported. The measures used are:

- Calm** approx. wind wave height 0.1 m
- Smooth** approx. wind wave height 0.5 m
- Slight** approx. wind wave height 1.0 m
- Moderate** approx. wind wave height 2.0 m
- Rough** approx. wind wave height 3.0 m
- Very Rough** approx. wind wave height 4.5 m
- High** approx. wind wave height 6.5 m
- Very High** approx. wind wave height 8.5 m
- Phenomenal** approx. wind wave height 11.0 m

Swell

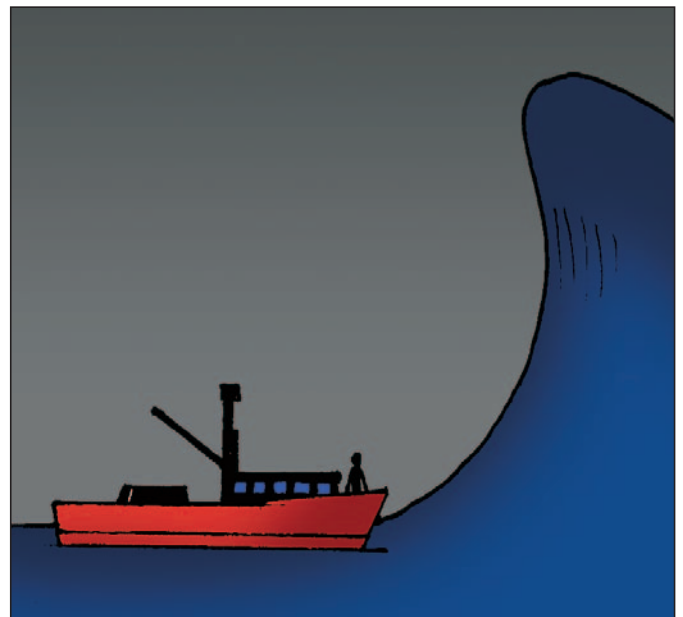
Swell is also forecast. Swell comes from either a distant disturbance, such as a cyclone or depression or the swell develops from wind waves that have been blowing from the same direction for a length of time.

Swell height can be given in metres or named as follows:

- Low** Under 2.0 m
- Moderate** 2 - 4 m
- Heavy** Over 4 m

Average Sea and Swell

The heights of both sea and swell refer to the average from the trough to the crest of the highest one third of waves present. Occasional waves may reach much higher; about one in a hundred is likely to reach half as high again, and one in a thousand twice the quoted average.



Wind Speed

Wind Speed is given in knots and the direction given is where the wind comes from.

Warnings are issued as follows:

Wind: The wind is expected to exceed 33 knots (either steady or in gusts)

Gale: Expect to about 45 knots as a steady wind, gusts can be 50% higher

Storm: To about 60 knots as a steady wind, gusts can be 50% higher

Tropical: Cyclone is over 60 knots but is only used for 'hurricane' type tropical storms

Visibility Distance

Fog: Less than 1.0 nautical miles

Poor: 1 - 3 nautical miles

Fair: 3 - 6 nautical miles

Good: Over 6 nautical miles

Average visibility in New Zealand is about 15 nautical miles

Sources of weather information

The two easiest ways of getting a marine forecast are by VHF Radio and telephone.

VHF Radio

Marine weather forecasts are announced on Channel 16 at 0533, 0733, 1033, 1333, 1733 and 2133 hours.

Met Phone

Other sources of forecasts

- **Local Coastguard stations on VHF**
- **Teletext.**
- **www.metservice.co.nz**
- **Local newspapers (remember information can be relatively old)**
- **Local radio stations**
- **National Radio at 0500 hours**
- **Auckland area has continual forecasts on Channels 20 or 21.**
- **Whitianga area has continual forecasts on Channel 23.**

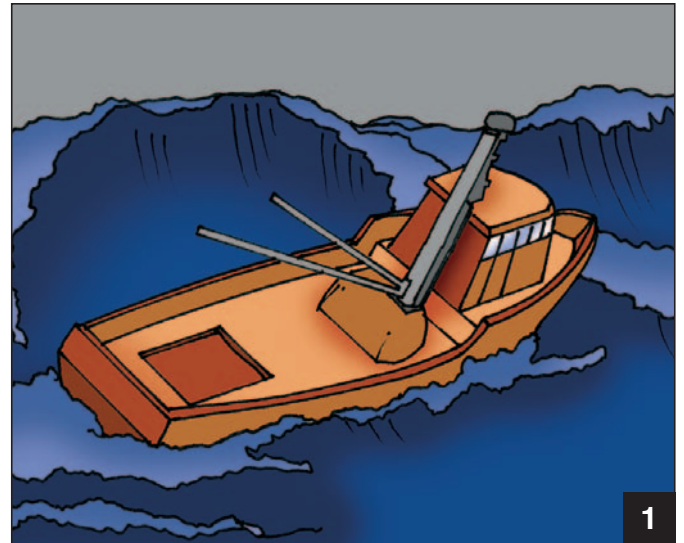
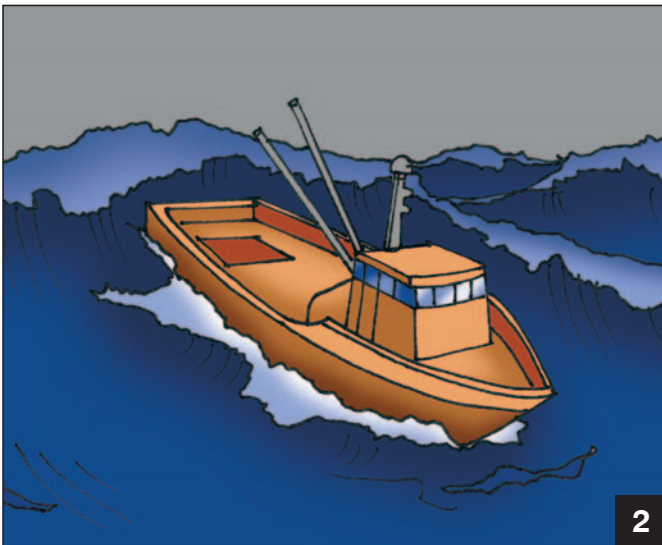


7.2 Extreme Sea Conditions

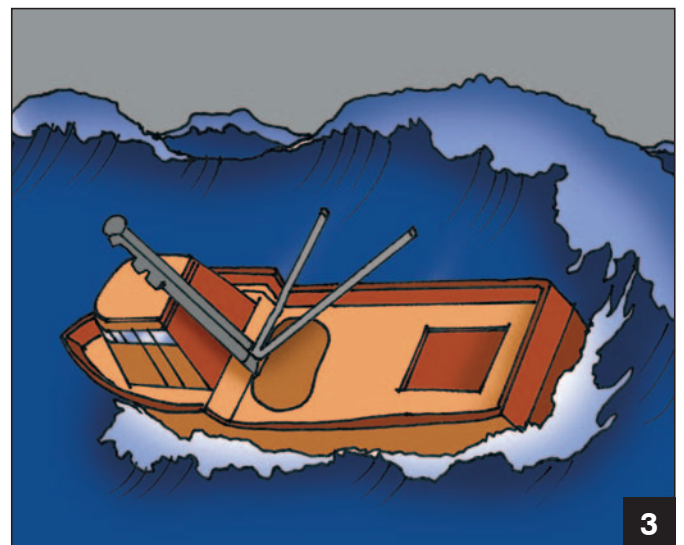
Dangers in extreme seas

Severe seas of any kind are dangerous if you are not prepared. You should take special care in the following situations.

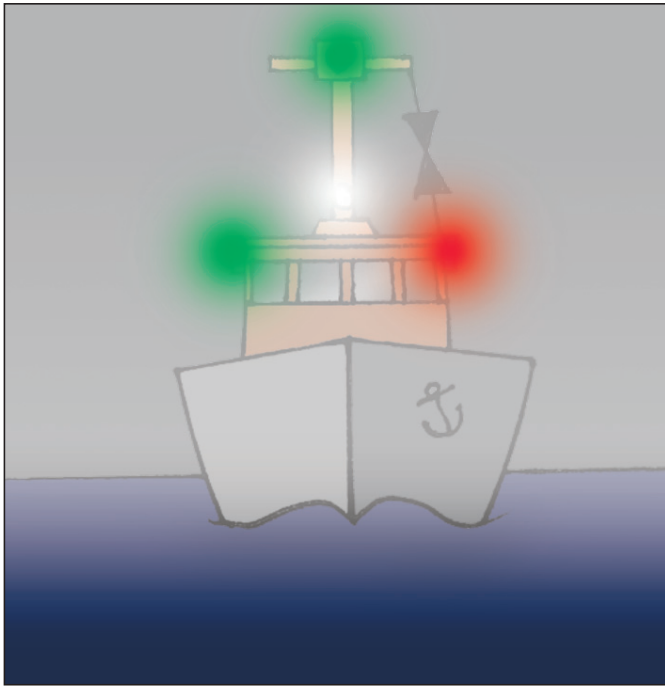
1. In beam seas, excessive roll can cause cargo to shift, creating a dangerous list. This could cause the vessel to capsize. Strong breaking waves could also capsize the vessel.
2. In following seas, a vessel may lose stability on a wave crest. If the vessel is overtaken by a wave crest, broaching may occur.



3. In quartering seas, the problems of beam and following seas are combined. Quartering seas represent the most dangerous situation in severe weather.



7.3 Fog



When encountering fog, and before you enter it, you must:

- Plot a fix on your chart or mark on a plotter
- Reduce speed (so you can stop in half the visible distance is a handy rule of thumb)
- Turn navigation lights on
- Post extra watchkeepers - by sight and hearing - preferably in the bow
- Start sounding one long blast (4-6 seconds) every two minutes while making way through the water and two long blasts every two minutes when stopped.

7.4

Crossing the Bar

Bars around the coast of New Zealand are notorious for accidents and demand special care.

Below are important safety tips you should follow **BEFORE** you cross the bar.

Before you cross the bar

- Communicate your plans to the harbour master or a shore station.
- Check weather, tide and bar conditions.
- Watch it for awhile and asses channel
- Ensure adequate stability.
- Ask for local knowledge if first time
- Batten down.
- All crew must be awake and wearing life jackets.
- Approach at moderate speed.
- Post a lookout to monitor sea conditions behind.
- Confirm successful crossing.



If in doubt - Stay Out!

In November 2001 Maritime NZ issued Boat Notice 10/2001 which contains the National Code of Practice for Bar Crossings. The Code was developed by a group comprising bar harbour harbourmasters, fishing industry representatives and Mariitime NZ, after extensive consultation with all sectors of the maritime industry. Copies of the Boat Notice are available on the Maritime NZ website - www.maritimenz.govt.nz.

The Seafood Industry Training Organisation distributes a video/DVD entitled “Crossing the Bar” which illustrates best practice on safely crossing the bar. Contact them on 04 385 4005 to receive a copy.