

Photographing dwarf minke whales in the Great Barrier Reef

By Matt Curnock

Each austral winter dwarf minke whales migrate to the northern Great Barrier Reef. When they arrive, they aggregate in the vicinity of the Ribbon Reefs, north of Cairns, most likely for breeding purposes. The timing and location of this aggregation is remarkably predictable from year to year, and many of the same individual whales are resighted in multiple years in the exact same locations. Their behaviour, too, is remarkable, and they are perhaps the most inquisitive and 'friendly' species of whale on the planet.

As a researcher with the Minke Whale Project, I've been fortunate enough to swim with and photograph dwarf minke whales in the Ribbon Reefs near-annually since 1998. I first learned about underwater photography by taking whale pictures for photo-identification purposes, and by picking the brains of numerous professional photographers with whom I've shared dive trips over the years. In this article I am passing on some key tips and tricks, learned over 25 years of photographing minke whales, to help you get the best results from your

Great Barrier Reef minke experience and underwater photography.

To learn more about the whales and the research program that studies them, please visit www.minkewhaleproject.org.

Choosing a trip

It's important to note that swimming with dwarf minke whales in the Great Barrier Reef requires a Marine Parks permit. As of July 2022, only eight dive tour operators hold these permits. These operators are required to follow strict management guidelines and contribute to monitoring of their whale interactions. Be sure to check that the operator you choose holds one of these permits (you can also search <https://www.gbrmpa.gov.au/access-and-use/permits/current-permit-application-and-decisions> to verify).

- Trips depart from: Cairns or Port Douglas, Queensland, Australia
- When to book: 90% of minke whale encounters in the Great Barrier Reef occur in June and July, and the number of encounters peaks in



Photo by Matt Curnock

Nikon D90, Patima housing, Tokina 10-17mm at 10mm. 1/160th f10. 200 ISO

late June and early July. Booking around this time gives you the best opportunity to see more whales, for

longer. Booking at the margins of the season (late May or early June; late July or early August) can be hit or



miss. Some of the operators' trips are sold out many months in advance – so book ahead as early as possible to avoid missing out.

- Day trips or live-aboard dive vessel? I strongly recommend choosing a live-aboard dive trip, to spend at least a couple of days in the vicinity of the Ribbon Reefs. Some day trips from Port Douglas occasionally see minke whales, but due to their itinerary and location, such encounters are usually fleeting.

Pre-trip preparations What to pack?

- Staying warm: The water temperature in the Ribbon Reefs during June and July usually varies between 26° and 22° C. This might not seem cold for folks used to diving in temperate waters, but some encounters with minke whales can last for several hours, and in this time you can lose a lot of body heat. I recommend wearing a 5mm steamer

Nikon D90, Patima housing, Tokina 10-17mm at 13mm. 1/200th @ f9. 200 ISO



Photo by Matt Curnock

wetsuit with hood, to allow you to spend as much time in the water with whales as possible. Note that many of the permitted operators have good quality wetsuits available for hire.

- Mask, snorkel, fins: BYO recommended, but also available for hire from most operators.

- Scuba gear optional: You don't need to be a scuba diver to swim with and take great photos of minke, and from experience, the best interactions and photos tend to occur on snorkel. However, the live-aboard itineraries do include visits to a number of superb dive sites, so if you can, you should!

- Sundries: Packing light is always advantageous, but I'd suggest including a rain jacket in your travel kit, and seasickness medication, if needed (it's usually windy at this time of year, with occasional showers).

Camera equipment:

- Wide angle, or course! Fisheye lenses work really well with these whales, and the usual corner distortion

isn't apparent when the background is blue sea. Some folks prefer the look of a rectilinear lens, and I've seen some great photos from these – but if/when a whale comes super-close, the wider the better I reckon. I use a trusty old Tokina 10-17mm fisheye zoom lens paired with a Nikon D7200 in a Nauticam housing, with dome ports of various sizes. A 45-degree magnifying viewfinder also helps immensely with neck comfort during long in-water interactions on snorkel.

- Strobes not required: The Code of Practice for swimming with the whales specifies no flash photography. You can bring your strobes for dives, but switch them off or leave them on the boat when the whales arrive. They won't improve your whale photos. The whales are too big and usually too far away to illuminate, and their skin is highly reflective.

- Topside camera: Bring it if you have it – a telephoto lens can help you capture minke surface behaviours and occasionally glorious sunsets.

One more (unusual) item:



- A quick-release tether (see photo above): Constructed of a bicycle tube, some climbing rope and a 25-30mm stainless steel snap-shackle. This device allows you to hold your camera with both hands whilst remaining safely connected to a surface rope, and the boat. Wear the tube around your waist, snap the shackle onto the rope, and hey presto! Your hands are now free to steady your camera in choppy seas, and you won't drift away from the boat. The quick-release shackle is critical, in the very unlikely event of a whale catching onto the rope and dragging you underwater. Note that the dive crew won't let you use such a device



Photo by Matt Curnock

Nikon D90, Patima housing, Tokina 10-17mm at 10mm. 1/250th @ f7.1. 200 ISO

without a functioning quick release mechanism, due to this risk.



Camera settings

As mentioned above, the best results are achieved with natural light only, near the surface, and usually on snorkel. Lighting conditions can vary suddenly (bright sun, passing clouds), which is why I tend to use the shutter priority auto-exposure mode. The whales' natural colour markings vary from pure white to a dark metallic grey, with lots of intricate patterns, particularly around their shoulder region. The white patch on their shoulder and pectoral fin tends to overexpose in a lot of photos. For this reason, I use my

exposure compensation to deliberately underexpose by a half-stop, or even more in bright sunny conditions. Newer cameras with high dynamic range might not need to do this. In any case, a low or base ISO setting will help you to get a more balanced exposure through the brighter hours of the day.

If you prefer to shoot in manual mode and are unsure where to start, here are some settings to begin with:

- Shutter speed: A minimum of 1/125s is recommended to avoid blurry photos. In full sun, I'm usually at 1/250s and am happy with the results.



Nikon D7200, Nauticam housing, Tokina 10-17mm at 10mm. 1/200th @ f5.6. 100 ISO

- ISO: 100 through most of the day, bumping it up in the early morning or late afternoon.

- Aperture: Mine is usually on auto (shutter priority mode), and will vary from f7 to f11 depending on the light level. If you're shooting manual with a crop sensor camera, f8 is a good place to start, or f10+ for folks with full frame sensors

and rectilinear lenses behind a dome, to improve corner sharpness.

- Shoot in RAW format: To capture images with the highest possible dynamic range, and for subsequent editing flexibility.

Getting the best results in-water

- Follow the Code of Practice: Don't chase or swim towards a whale. It's illegal,

they'll swim away, and your fellow passengers will get mad at you for ruining their minke experience. For the best experience and the best photos, simply chill out on the snorkel rope and let the whales come to you. This may be the laziest whale swim experience in the world. Just lie there and wait!

- Patience, patience, patience: If you want to get



Nikon D7200, Nauticam housing, Tokina 10-17mm at 10mm. 1/200th @f5.6. 100 ISO

good photos, be prepared to spend a long time in the water. In-water interactions with minke whales can often last several hours, so you don't need to rush to be first in the water. However, "interesting opportunities" can sometimes happen for those who stay in the water until the very last minute, when everyone else has returned to the boat.

- Watch and learn from their behaviour: They'll be watching you, too. Some whales will become bolder and approach more closely over

repeat passes. If there are several whales around, one may sneak up behind you. Whatever happens, enjoy the experience, and be ready to hit the shutter with a split-second notice.

- Snorkel really does get better results than scuba: Scuba divers are noisy and move around in three dimensions, so the whales tend not to approach them as closely. Snorkellers holding a rope on the surface, who are relatively still and predictable, tend to be approached much more closely.

- Bonus points for: dramatic lighting (e.g. sun rays in the late



Another example of the healthy coral reefs that can be dived during a minke whale trip. Nikon D7200, Nauticam housing, Tokina 10-17mm at 10mm. 1/250th @f11. 100 ISO

afternoon), multiple whales in the frame, close-up eyeball, cool poses (e.g. in mid-turn, arched back), and behaviours (e.g. bubble blast, belly presentation, head-rise, gulping, pirouetting – see <https://minkewhaleproject.org/> to learn more)

Post processing

I won't offer too many tips here, as there are lots of different ways to do this with different software. Using Lightroom (v.6) I usually start by white balancing from the

white shoulder/flipper patch. Then perhaps add a touch of clarity, pull back the highlights, remove a bunch of annoying spots and scatter, maybe bump up the whites and darken the blacks a bit, season to taste, et voilà!

Whatever happens – it's all up to the whales

Following the advice above will give you the best chance to get good photos from your minke whale encounters. But remember – these are wild animals in their natural environment. They are free to do their own thing, and there are no guarantees

that they'll approach you or put on a show for your benefit. It's amazing that they show any interest in humans at all. If you only get a fleeting glimpse of a whale, you can still appreciate the experience of seeing a four-ton, six-metre, free-ranging, high-speed, oceanic, enigmatic, migratory rorqual whale that remains taxonomically undescribed and about which scientists still know astoundingly little. Enjoy!

Share the love

- You can donate copies of your minke photos to the Minke Whale Project, and the researchers can identify the individual whales using their natural colour patterns. How cool is that?

- You can also join our beloved Facebook community of whale nerds in the group "Friends of the Minke Whale Project" and share stories, photos and highlights from your minke experience.

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www.divephotoguide.com



Swimming with dwarf minke whales

Follow the Code of Practice:

- Follow instructions from crew at all times.
- Never swim towards a whale.
- Enter and exit the water quietly.
- Hold onto safety lines in the water (when provided).
- Do not touch or make physical contact with a whale.
- Avoid rapid movements when in the water.
- Use natural light only for photography.



Support the Minke Whale Project:

- Donate copies of underwater photos/video to our photo-ID study.
- Complete a Minke Whale Questionnaire.
- Become a *Friend of the Minke Whale Project*.
- Visit www.minkewhaleproject.org for more information.

