

BYCATCH IN WCPFC FISHERIES: AN OVERVIEW

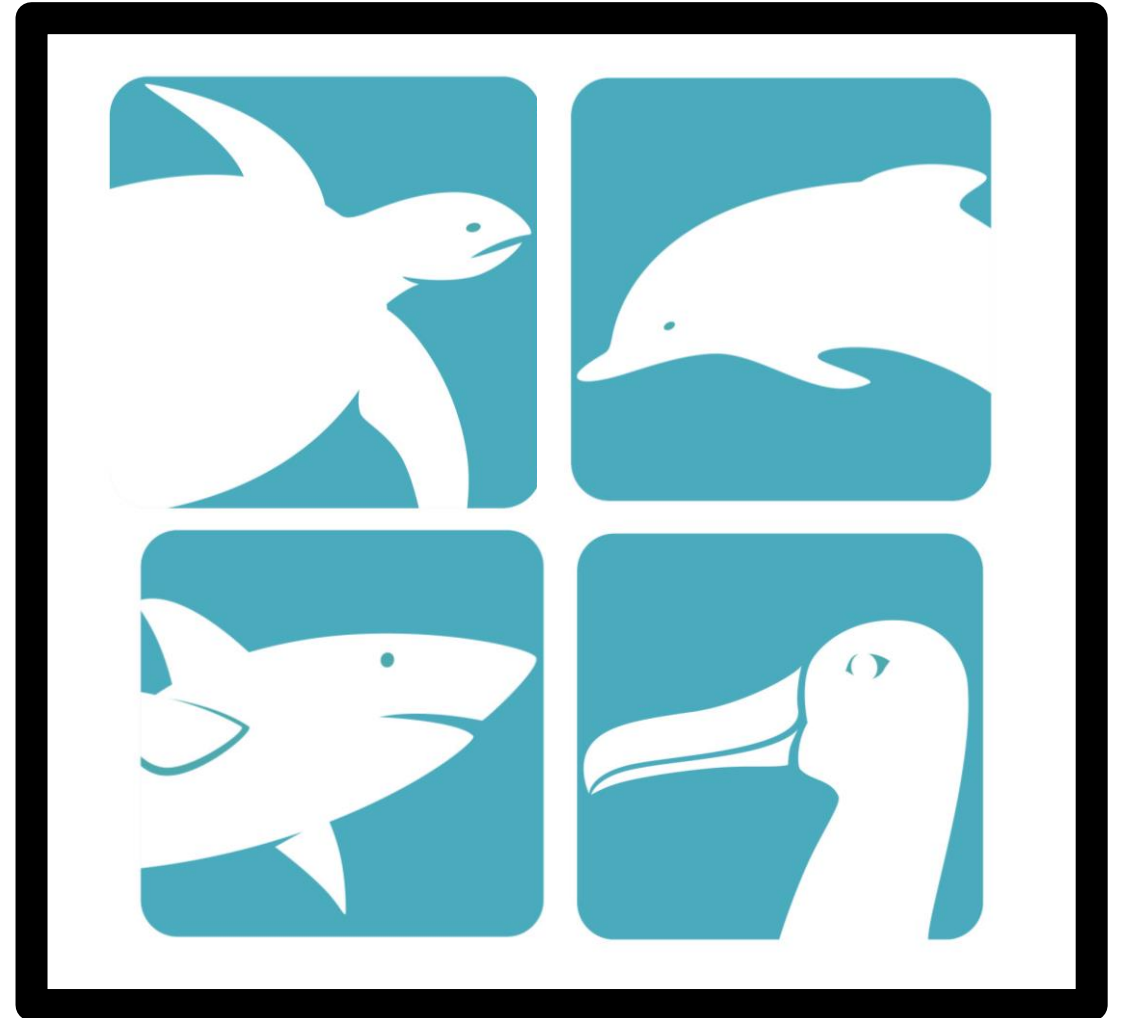
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Sharks and Bycatch

WHAT IS BYCATCH?

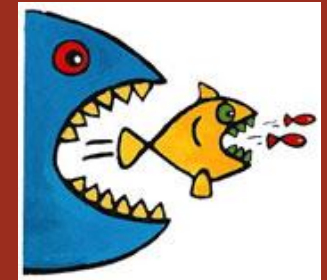
Definition: Discards + retained catch of non-target species (Alverson et al. 1994)

→ sharks, sea turtles, seabirds and marine mammals



WHY SHOULD WE CARE ABOUT BYCATCH?

- Legal/Regulatory – WCPFC Convention requires assessing impacts to target, non-target and dependent/associated species; regulations apply
- Ecological – many of these species don't have fast reproduction; if they disappear the ecosystem may become unbalanced
- Economic – today's bycatch may be tomorrow's target species; don't waste them



WCPFC CONVENTION & BYCATCH



Article 10 –

“adopt, where necessary, conservation and management measures and recommendations for **non-target species and species dependent on or associated with the target stocks**, with a view to maintaining or restoring populations of such species above levels at which their reproduction may become seriously threatened”

...and other mentions of assessing impacts, collecting data, and applying the precautionary principle

WHY THIS WORKSHOP?

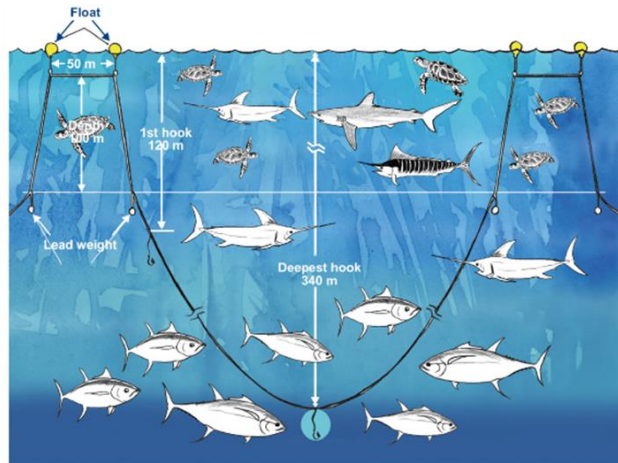


- Introduce the Bycatch Management Information System (BMIS)
- Show how it can help address some of the bycatch issues facing the WCPFC
- Build capacity for understanding bycatch problems and demonstrate tools to facilitate solutions
- Discuss current practices and data requirements to identify potential improvements



WORKSHOP'S THREE PILLARS

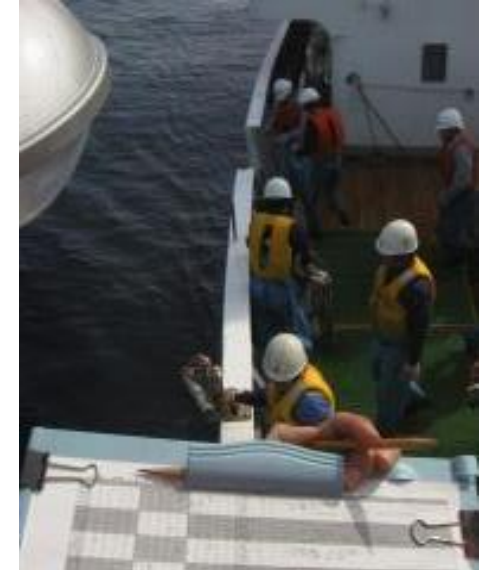
Mitigation



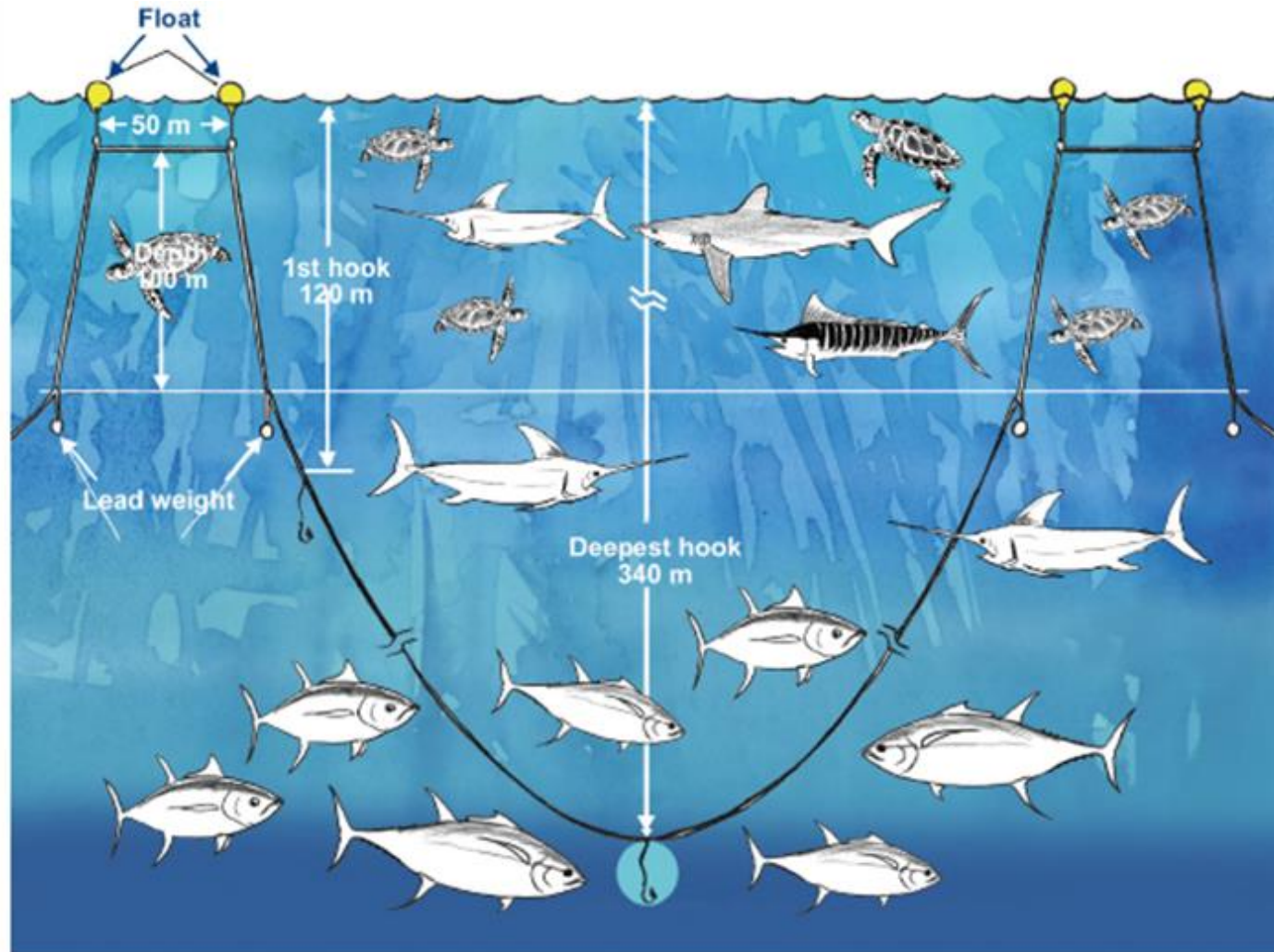
Safe Release



Monitoring



MITIGATION



Using special gear or techniques to reduce catches of unwanted species, particularly threatened species

SAFE RELEASE

Techniques for releasing species once they are caught to maximize their survival while maintaining crew safety

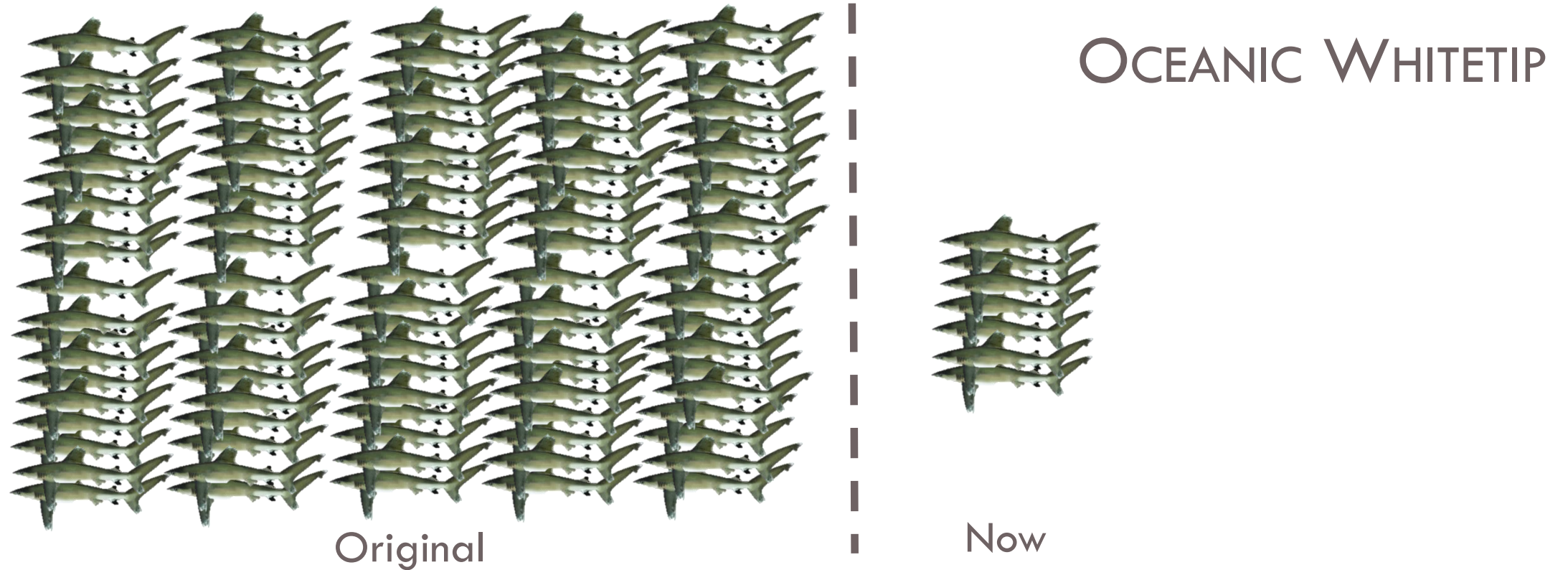


MONITORING

Collecting data
on the use of
mitigation
measures and
their
effectiveness



SHARKS: STATUS & ISSUES



Some shark populations have been reduced to a small percentage of their original size

SHARKS: NO FINNING (CMM 2010-07)



Each country must control finning (for example, 5% fins-to-carcass ratio onboard or other method)

Report catches and discards of 14 key sharks

SHARKS: NO RETENTION OF OCEANIC WHITETIP (CMM 2011-04)

No retention, transshipping, storing or landing

Prompt release unharmed

Record catch and note whether dead or alive



SHARKS: NO RETENTION OF SILKY (CMM 2013-08)

No retention, transshipping,
storing or landing

Prompt release unharmed

Record catch and note whether
dead or alive



Southwest Fisheries Science Center, NOAA Fisheries Service

SHARKS: PROTECTION OF WHALE SHARKS (CMM 2012-04)



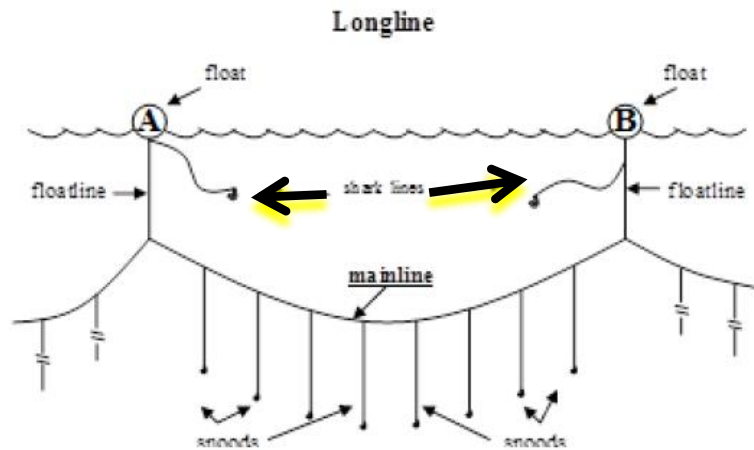
Prohibited to set on a whale shark if sighted before a purse seine set

Report incident and safe release method to the WCPFC Secretariat

Safe release guidelines on what NOT to do

SHARKS: TARGETING (CMM 2014-05)

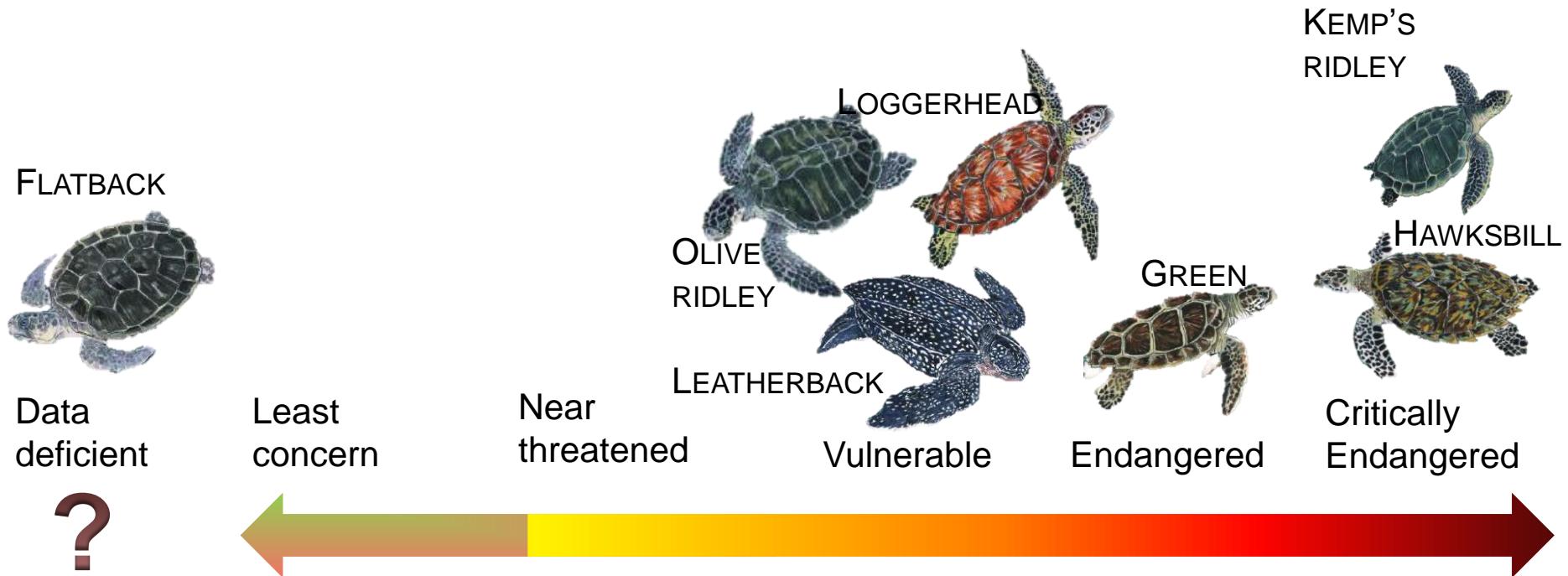
Each country must choose to ban shark lines or wire leaders



If targeting sharks, submit a management plan

SEA TURTLES: STATUS & ISSUES

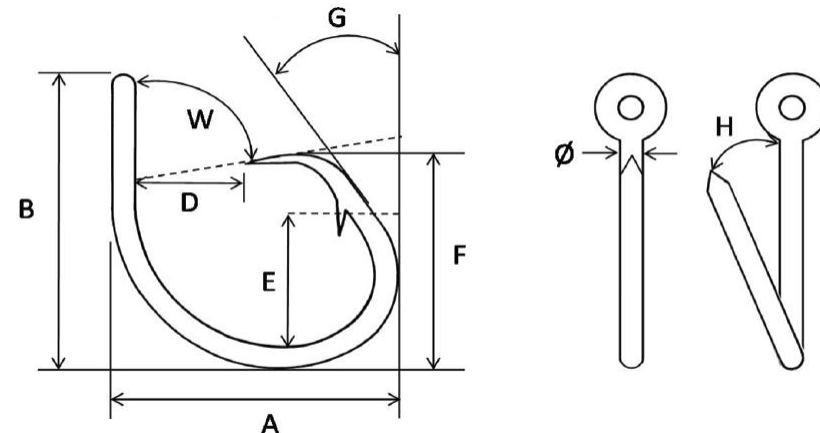
- Seven sea turtle species
- Six are threatened
- Catches depend on temperature, location, bait



SEA TURTLES: CIRCLE HOOKS AND FINFISH BAIT

(CMM 2008-03)

- Applies to shallow-set longlines (where most hooks <100m):
 - use whole finfish bait – OR –
 - use large circle hooks with $\leq 10^\circ$ offset –OR–
 - other measures approved by WCPFC
- Practice safe release
- Report all interactions to WCPFC



SEABIRDS: STATUS & ISSUES

15 of 22 species of albatrosses are threatened with extinction (IUCN Red List CR, EN or VU)

45% of world's breeding albatrosses found in WCPO (petrels also a concern)

Bycatch in fisheries is their biggest threat

Low risk in tropics (20°N-20°S)

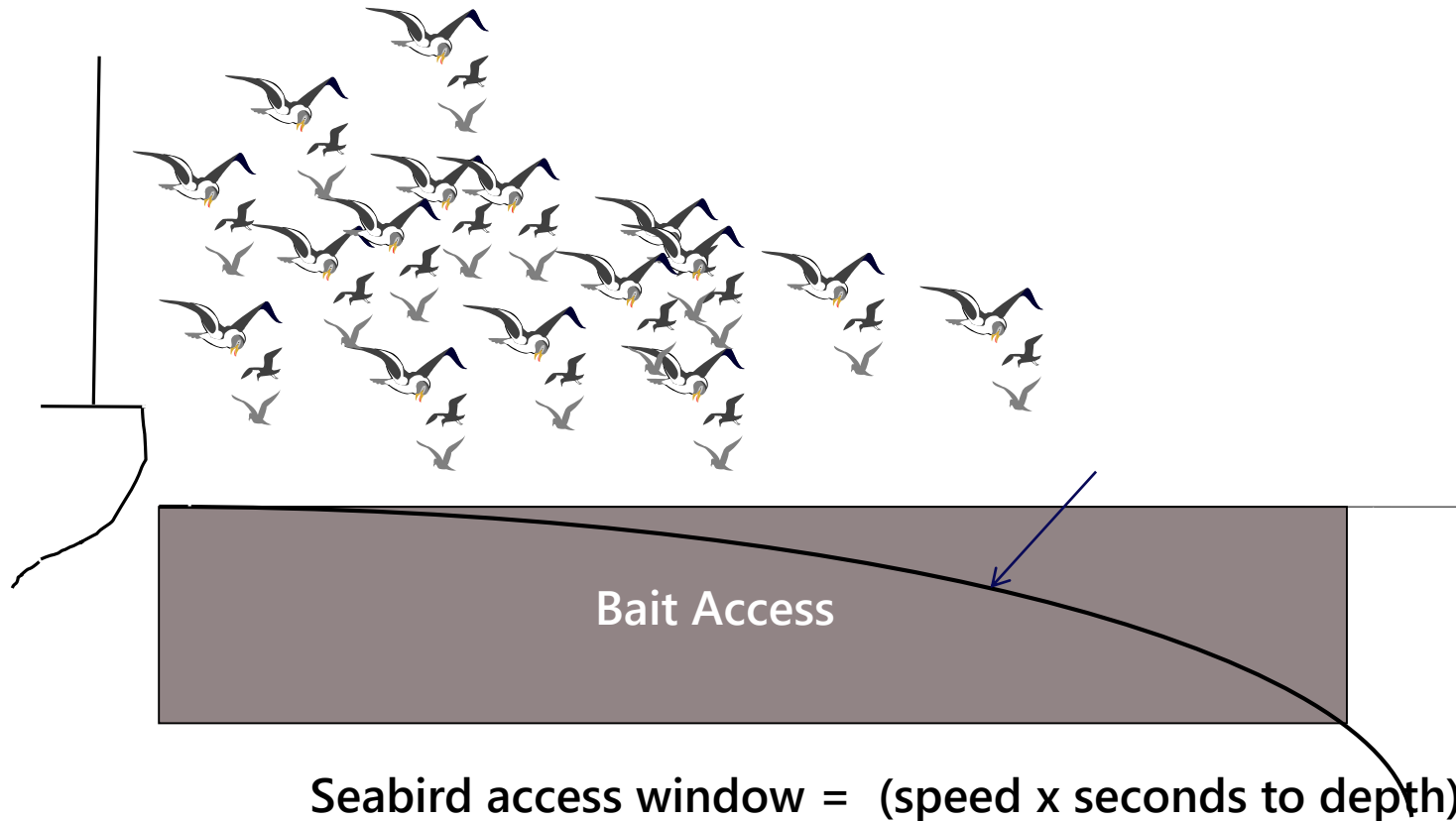


SEABIRDS: AVOIDING HOOKING (CMM 2017-06)

South of 30°S two of the following techniques must be used:

- Weighted branchlines
- Night setting
- Tori Lines

North of 23°N two techniques, selected from a longer list, must be used



MARINE MAMMALS: STATUS & ISSUES



STRIPED DOLPHIN

PILOT WHALE

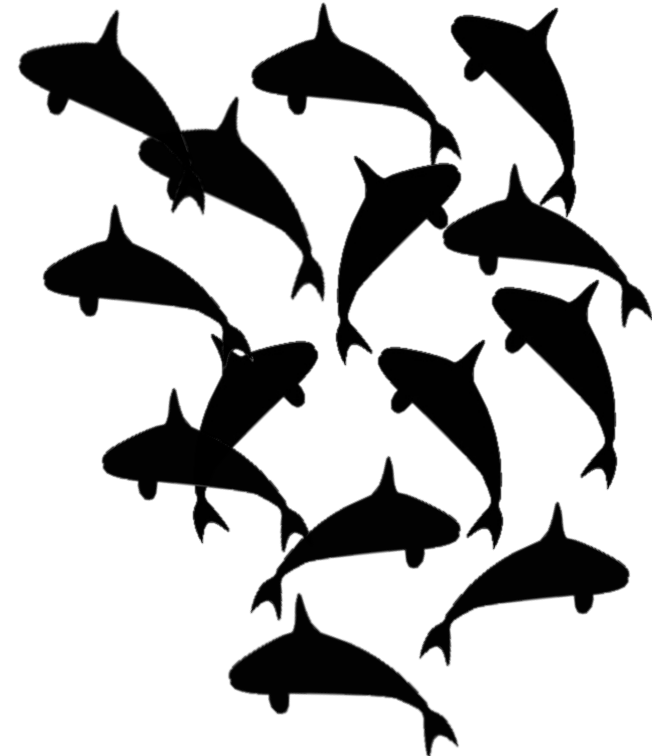
FALSE KILLER WHALE

- False killer whale and dolphin interactions (toothed cetaceans) are widely observed
- Mortality rates are generally high (38-65%)
- Population status is OK or unknown (IUCN LC or DD)
- WCPFC data last examined for 2010

MARINE MAMMALS: PROTECTION OF CETACEANS (CMM 2011-03)

Prohibited to set on a cetacean if sighted before a purse seine set

Report incident and safe release method to the WCPFC Secretariat



DAY 1 PROGRAMME

- Introduction to BMIS
- Observer data
 - Data collection protocols (MSDF)
 - What's in the database
 - Potential improvements to MSDF
- Critical Review of Scientific Papers (2 case study exercises)
- Safe Release Guidelines (shark and seabird group exercises)



BYCATCH
MANAGEMENT
INFORMATION
SYSTEM