DESTRUCTIVE FISHING PRACTICES
INTRODUCTION

• All fishing methods/practices have an impact on the target resource and may affect also non-target species.
• Many of them also have an impact on the wider aquatic environment.
• But the "normal" effect of exploitation should not be confused with "destruction"
INTRODUCTION

DEFINITION: DESTRUCTIVE

- to reduce to a useless form
- to spoil completely
- to put out of existence
- to wipe out, annihilate, demolish, devastate, tear down
INTRODUCTION

What is Destructive Fishing?

• **Destructive fishing** refers to any type of fishing technique that destroys fish habitat.
TYPES OF DESTRUCTIVE FISHING PRACTICES

- **Dynamite fishing** or “blast” fishing or the use of explosives
- Spear fishing
- Beach Seining
- Trap/Pot fishing
- Poisoning
EFFECTS OF DYNAMITES

• Dynamite and other explosive fishing methods destroy habitats and breeding sites.
• Explosions can produce fairly large craters, devastating 10-20 square meters of bottom.
• In coral reefs, re-colonization of damaged habitats is very slow and complete recovery may take several decades.
• Larger fish are stunned and removed by fishers, but many smaller or less desirable fish die and are left amongst the broken coral.
EFFECTS OF DYNAMITES

• In many instances, errors of manipulation have lead to injuries and death of humans.
• Explosives can have very serious consequences for the resources, the environment, and unfortunately sometimes also for the users themselves.
EFFECTS OF SPEARFISHING

• Spearfishing is one of the few fishing techniques where each target is individually selected, so bycatch should be zero – a positive feature.

• Spearfishing activities are often concentrated at particular sites, and the activity is, in the right conditions, an extremely effective and efficient method of harvesting target fish.

• Where reef species are heavily targeted, local populations of adult fish can be completely removed = regional extinction!!

• FACT: Touching Reefs, even slightly, can harm them. Frequent human contact (spearfishing and otherwise) kills the reefs over time.
Effects of Beach Seining

• Beach seines are generally used near the shore in shallow waters either in inland and sea waters.
• Shallow waters close to the shore are often spawning or nursery grounds.
• Beach seining in such areas disturb the breeding activities and lead frequently to the capture of juveniles.
• For these reasons, the use of beach seine is in a number of countries regulated/restricted by law.
Know the Facts

14. (2) of The Fishing Industry Regulations, 1976 says,

“no person shall, for the purpose of any fishing, make use of any beach seines unless –

(a) The mesh size of the bunt be 3.17 centimeters (1 ¼ inches) or more wide upon the bunt being fully stretched;

(b) The mesh size of the corners be 4.43 centimeters (1 ¾ inches) or more wide upon the corners being fully stretched;

(c) The mesh size of the wings be 5.08 centimeters (2 inches) or more wide upon the wings being fully stretched.”
EFFECTS OF TRAP FISHING

• Although this gear is not necessarily destructive, the process of setting and retrieving the trap is largely responsible for the destruction on the reef.
EFFECTS OF POISONING

• The use of poisons is widespread, in some regions in both fresh and marine waters - especially in coral reefs and coastal lagoon fisheries.
• They are effective at killing or stunning, indiscriminately, the fish, which are then collected by divers, or through netting and seining.
• The poisons kill also other organisms from the ecosystem, including the coral reef-building organisms.
VERY IMPORTANT!!!

- Although reefs look like a dormant underwater bush, they are very much alive.
- Reefs grow very slowly over time. In fact, an inch of coral reef takes nearly 100 years to grow!
OVERALL EFFECTS

• **Destroys habitat.** Destructive fishing practices destroys the habitat where reef animals live and breed. Recovery, if possible, may take decades.

• **Inhibits the growth of new corals.** The sediment left behind from dynamiting makes it difficult for juvenile corals to settle and grow.

• **Reduces fish stocks.** A loss in the number of fish due to habitat destruction can lead to fewer fish and reduces the ability of fish to reproduce. A significant number of non-targeted species are also killed through destructive fishing.

• **Loss of fishery jobs & income.** There are over 15,000 registered fishers in Jamaica of which 328 belong to Alligator Pond.

• **Loss of coastal protection and tourism.** Reefs help to break the force of waves thus protecting our coastline. Tourism is our main foreign exchange earner.

• **Loss of lives.** Especially where dynamites can explode prematurely and result in severe injury and death.
WHICH IS THE GREATEST THREAT?

• While all of the above mentioned techniques are considered destructive, one of them poses the greatest threat.

• Spearfishing, Beach seining and Trap/Pot fishing are not greatly damaging if used properly.

• Poisoning will kill coral reefs if used extensively.

• However, DYNAMITING is by far the more destructive force of them all!!!
POSSIBLE WAYS TO PREVENT DESTRUCTIVE FISHING

• Enforce the Law.
• Create Effective Marine Protected Areas (MPAs). creating “no-take” MPA zones.
• Create Alternative Livelihoods.
What can you do to help?

For SPEARFISHING:
- Do not remove the largest fish you see. Why?
  Because:
  1) larger females yield more eggs
  2) larger fishes of some species provide leadership in migrations to spawning aggregation sites
  3) offspring of larger females of some species have better survival rates
- Avoid using spears near reefs
What can you do to help?

For Trap/Pot Fishing:
- Avoid setting traps on reefs
- Exercise care while setting and hauling traps/pots
What can you do to help?

For Beach Seines
- Allow fishing grounds time to recuperate.
- Always use what is prescribed by law.
- Release juvenile fish from your catch.
What can you do to help?

For DYNAMITING
- STOP !!! It is against the law use “dynamite or other explosive substances with intent thereby to take, kill or injure fish in any water” (Wild Life Protection Act 10 (a))
- Report individuals to the relevant authorities.
  - National Environment and Planning Agency
  - Marine Police
  - Coast Guard
  - Jamaica Constabulary Force
  - Fisheries Division