INVERTEBRATE FISHERIES IN THE CNMI
Commonly Harvested Invertebrate Species for the Markets

- Lobster
- Octopus
- Squid
The primary crustacean fishery,
Current landings are not effectively being captured in the market surveys,
Harvests are mainly from night spearfishing activities,
Two species are commonly harvested (P. versicolor/P. penicillatus)
Lobster Fishery cont...

- Harvest restrictions have made it difficult to capture lobsters
- Limited information have been obtained from harvest activities in the Northern Islands
- A resource study was performed during the RIOMA cruise,
Two species of octopus are commonly sold in the markets (*O. cyanea, Octopus sp.*)

Harvests are mainly landed by small scale spear fishing operations

Subsistence harvests also occur, but information for this activity is limited.
Octopus fishery cont..

- Limited research has been conducted on this fishery
- No regulations have been considered for this fishery
Description of the Squid fishery

- Squid are commonly sold in the local markets
- Limited information is known for this resource
- Landings are mainly from small scale fishers
Subsistence harvest are also occurring, but limited information is collect from this activity.

Also potentially targeted by skilled hook and line fishers.
Sporadic Invertebrate Fisheries

- Sea Cucumber Fishery
- Deep Water Shrimp Fishery
- Trochus Fishery
Deepwater Shrimp Fishery

- Limited data have been collected between 1981, 1987 and 1993
- The fishery has been sporadic over the past twenty years
- Little to no activity since then
- A resource assessment has been conducted on this fishery.
A survey was conducted while the fishery was active in 94’–96’

Landings were recorded

Two common species were identified (*H. laevigatus*/*H. encifer*)

Results suggest the fishery is not fully exploited and can be expanded.
This is a pulse fishery

The last permitted fishery was in 1997

Biomass assessments were conducted in 1997 and 2006

The main specie targeted during the fishery was *A. mauritiana*, however, other species of value were also harvested.
A ban on the harvest of sea cucumbers was established in 1997, and sea cucumber MPAs were also developed during the same period.

Lau Lau Bay
Sea Cucumber Sanctuary

Sea Cucumber Moratorium
1999 - 2009

In 1999 Public Law 11-63 was passed which established a CNMI-wide prohibition on the harvesting of sea cucumber, seaweed, and sea grass.

It is ILLEGAL to harvest these organisms ANYWHERE in the CNMI.

CNMI’s Marine Protected Areas
Protecting our reefs and fish so they can be enjoyed today and tomorrow.

Call 664-6000/30/31 to report violations.
Trochus Fishery

- Commercial access for the Trochus fishery was allowed in 1996
- Conservation measures such as temporal and size restrictions were established for the fishery
- Some information was collected during this fishery
- A stock assessment was conducted in 1992, with the assistance of the SPC.
Non-commercial Invertebrate Fishery

- These are invertebrate resources that are known to be harvested but are not captured in the commercial markets.

- Resources are commonly harvested for home consumption or subsistence fishing.
Other Harvested Invertebrates

- Hagahaf (*G. tenuicrustatus*/Lightfoot crabs)
- Aliling pulan (*Turbo sp.*/Turbo snails)
- Aliling tulompu (*Trochus sp.*/Top shell snails)
- Hagui (*Ocypode sp.*/Ghost crab)
- Tagula (*Acanthopleura sp.*/Chiton)
Other harvested cont........

- La’un, Nunufu’ (*Tripneustes gratilla*/Diadema *sp.*/*Urchins*)

- Hima (*Tridacnida *sp.*/*Giant clams*)

- Tapon (*Periglypta *sp.*, *Gafrarium *sp.*/*Cockle clams*)

- Subucao (*Dendropoma *sp.*/*Vermetid Snail*)

- Other
DISCUSSION

- Much of the information obtained for the various invertebrate fisheries have been done with the assistance of collaborators.

- Most of the research conducted were for commercial fishery activities.
Minimal information is being collected on subsistence activities.
RECOMMENDATIONS

• Develop monitoring program with companies involved in the invertebrate fishery.
• Initiate program to assess status of invertebrate resources which lack information.
• Focus assessments on key species being sold in the markets.
Questions or Suggestions?

Michael C. Tenorio
Division of Fish and Wildlife
Fisheries Research Section
mtenorio_dfw@live.com