

Species Action Plan



Caribbean Spiny Lobster

- Scientific name** *Panulirus argus*
- Common name(s)** Caribische langoest; Krèf
- Key values** Lobster fisheries provide income for fishermen and restaurants. They are [indicator species for microplastics](#)
- Population status in the Caribbean** Lobster populations are considered to be in decline [throughout the region](#).



Photo: [Marta & Mark Bockstael-Rubio](#)

Distribution FAO areas; Atlantic; Western Central, Eastern Central, Southwest. Pacific; Eastern Central

Habitats Mostly cryptic; coral reef, seagrass. Sandy substrate for migration.

SPAW	IUCN Red List	CITES	CMS	Local legislation		
ANNEX III	NONE	NONE	NONE	Bonaire	Statia	Aruba

Threats

Overfishing	Fishing pressure includes use of lobster pots and traps (windward islands), hand collection, spearing. Lobster traps can damage coral reef communities and ghost traps can be problematic. Removing juvenile and egg-bearing female lobsters disrupts the reproductive cycle.
Disease	Spiny lobsters are susceptible to disease throughout their life cycle Changes in habitat and pollution may make lobsters more vulnerable to disease
Climate change	The expectation is that climate change will impact lobster populations but little is known about expected changes .

Management goals

<p>Overfishing</p> <ul style="list-style-type: none"> ○ Work with local fishermen to ensure continued economic benefits from a robust lobster fishery ○ Ensure stable lobster populations through reasonable and enforceable restrictions on take ○ Minimize mortality caused by lost/ghost traps ○ Protect local lobster fishery from external threats ○ Explore opportunities for aquaculture [See: <i>Lobster hatchery</i> https://www.nationallobsterhatchery.co.uk]
<p>Disease</p> <ul style="list-style-type: none"> ● Monitor published information for updates on disease in the Caribbean ● Establish a protocol for monitoring and managing potential disease outbreaks
<p>Climate change</p> <ul style="list-style-type: none"> ● Monitor science fora and publications for updates on the impacts of climate change on lobster ● Integrate new knowledge into monitoring and research programmes

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Recommendations

Legislation

- Review legislation to ensure it includes adequate protection for lobster populations, protecting undersize and egg bearing lobster and provides opportunities to regulate use of pots, traps and catch size with appropriate sanctions
- Introduce permitting system for fish pots/traps and/or exclude non-local fishers
- Use zoning for catch control
- Look into the feasibility of traceability schemes

Enforcement

- Strictly enforce no take of egg bearing lobster
- Strictly enforce size limits
- Strictly enforce closed season
- Monitor and ensure fish markets are aware of restrictions

Science and monitoring

- [NOTE: Standardized monitoring protocols to be developed by DCNA working group]
- Collect baseline and historical data on lobster numbers and catch
- Monitor lobster populations (size, distribution, numbers)
- Study reproductive cycle to determine effectiveness of closed season for lobster
- Use socio economic monitoring to establish value of lobster fishery
- Monitor landed catch (including catch per unit effort) +/- restrictions [catch limit, pot limit etc]
- Monitor by-catch (if applicable)
- Explore effective solutions to reduce lost/ghost trap impacts
- Establish presence/absence of biological corridors and migration routes
- Explore opportunities to set up local lobster aquaculture

Stakeholders

- Keep in regular dialogue with fishermen
- Support local fisheries initiatives, especially making fishing safer and better organised (e.g via fishing co-operative)

Networking

- Attend GCFI (and similar conferences) to share lessons learned and to learn from other practitioners

Information - education

- Develop information package for use in schools
- Examples of lobster regulations: [NOAA](#)
- Information on marine debris, plastics and microplastics: [UN CMS marine debris](#)
- Lobster taxonomy: [Food and Agriculture Organization of the United Nations](#)

Gaps

- Population and catch data not readily available for Dutch Caribbean
- Weak island legislation
- IUCN designation: Caribbean spiny lobster is 'data deficient'

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General information

Description Caribbean Spiny Lobster

- average length 20 cm (~7.9") up to 45 cm (~17.7").
- weight up to 4.5 kg (~9.9 lbs).
- typical lobster body shape and segmented carapace

Distinctive features:

- striped, orange-brown with white spots on the carapace and tail
- head and legs have a bluish tint
- shell has spines
- one of its two pairs of antennae are very long and covered in spines;
- no large pinching claws of the typical American Lobster (*Homarus americanus*);
- four large distinctive spots on the tail distinguish it from other lobsters.

Biology Caribbean spiny lobster can be found in shallow water to depths in excess of 90 m, migratory females move to deeper water for spawning. They are sexually mature at a length of about 70 to 80 mm (~2.8 to 3.1"). Mating takes place in the spring and spawning in the summer, eggs are fertilised externally. The number of eggs varies from 200,000 to 700,000, depending on the size of the female. Average life expectancy is approximately 20 years.