

WORLD HERITAGE NOMINATION - IUCN SUMMARY

653: TUBBATAHA NATIONAL MARINE PARK (PHILIPPINES)

Summary prepared by WCMC/IUCN (January 1992) based on the nomination submitted by the Government of the Philippines. This original and all documents presented in support of this nomination will be available for consultation at the meetings of the Bureau and the Committee.

1. LOCATION

Located in the middle of the Central Sulu Sea, 181 kilometers southeast of Puerto Princesa City, Palawan Province, in the Municipality of Cagayancillo.

2. JURIDICAL DATA

Established by Proclamation in 1988, and protected under Presidential Decree. Land/water tenure is held by the Government.

3. IDENTIFICATION

Covering 33,200ha the park comprises two atolls, North and South Reef, separated by an eight kilometer channel. The North Reef is a large oblong-shaped continuous reef platform 2km wide and completely enclosing a sandy lagoon some 24m deep. The most prominent feature is the North Islet which serves as a nesting site for birds and marine turtles. Steep and often perpendicular walls extending to a depth of 40-50m are characterize the seaward face of the reef. A very high diversity of fish has been recorded with 379 species in at least 40 families. There is a diverse coral assemblage, with species representing 46 genera.

The South Reef is a small, triangular-shaped reef about 1-2kms wide. Like the North Reef, it consists of a shallow platform enclosing a sandy lagoon. South Islet is a coralline-sand cay of approximately 800 sq.m, and is also used as a nesting site. Bird species include brown boobies, and red-footed boobies, sooty tern and crested tern. Marine turtles nest on some of the beaches, including threatened hawksbill and green turtles.

Tubbataha is exposed to both the south-west and north-east monsoons. Rough seas are experienced from July to October and from November to March in the north-east monsoon.

Four species of tree and four species of grass are found on both islands. Ten species of macroalgae are found and extensive seagrass beds grow on the shallower parts of the reef and lagoon.

4. STATE OF PRESERVATION/CONSERVATION

There are no permanent inhabitants on the reefs, other than during the fishing season, when fishermen from Cagayancillo and other parts of the country establish temporary shelters.

Tubbataha has remained relatively pristine due to its inaccessibility and its isolation from population centers. However, there have been increasing disturbances from blast fishing, large scale collection of sea bird and marine turtle eggs, giant clams and other marine resources, spear fishing, collection

of aquarium fish and disturbances to wildlife. Most of these activities are illegal. A proposal by a commercial operation to establish an extensive seaweed farming operation with up to 24,000 people located on the islands has been averted.

The reefs have benefited from two years of protective management, with improved cover and richness of indicator species. However, management is not preventing all destructive fishing. Patrolling and surveillance is undertaken by the Tubbataha Foundation, a non-governmental consortium.

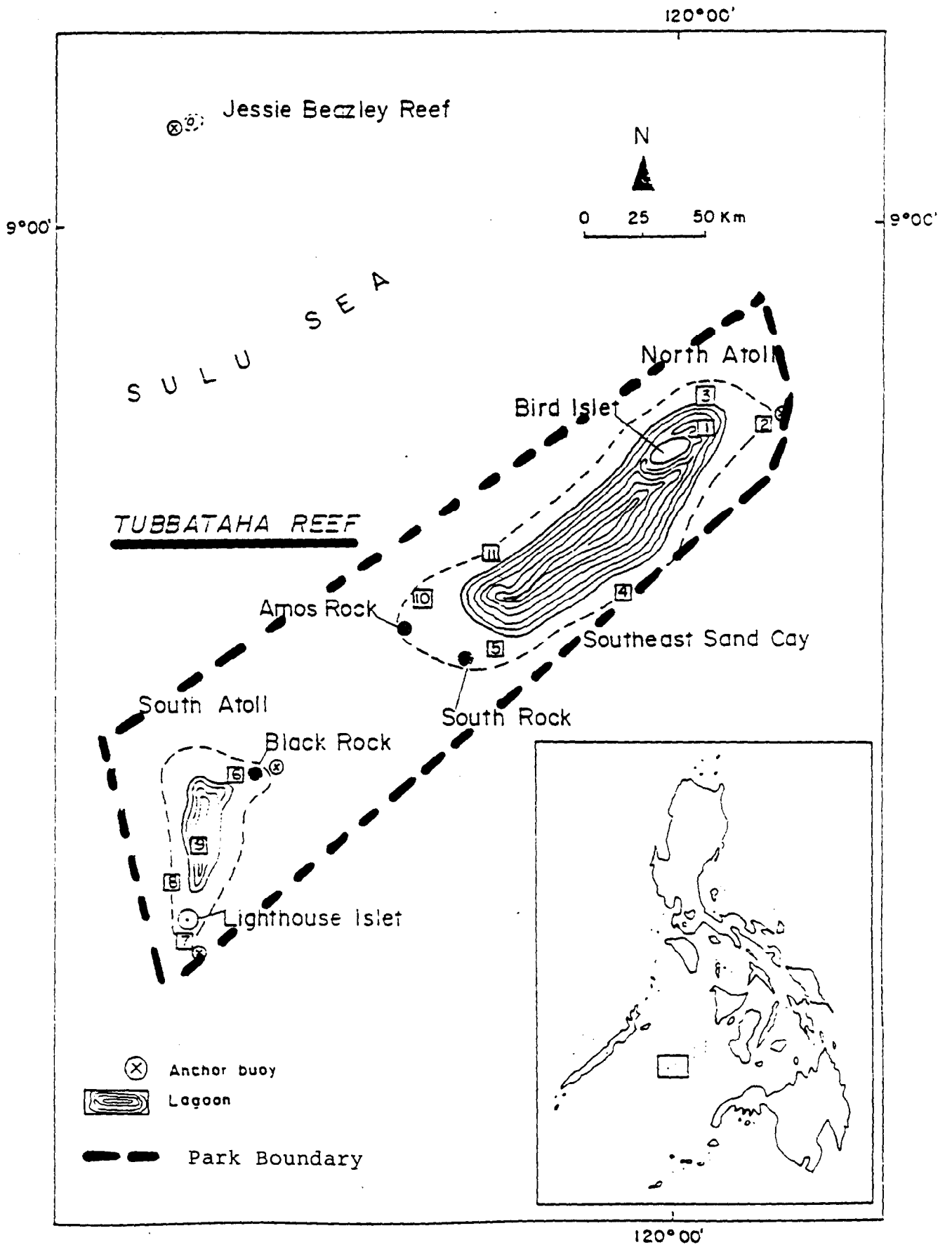
5. JUSTIFICATION FOR INCLUSION ON THE WORLD HERITAGE LIST

The Tubbataha National Marine Park nomination, as presented by the Government of the Philippines provides the following justification for designation as a World Heritage property, although the precise criteria are not specified.

Natural property

- (iii) **Contain unique, rare or superlative natural phenomena, formations or features or areas of exceptional beauty.** Tubbataha represents a unique example of pristine atoll reef, with a very high diversity of marine species.

The reef components include a 100m perpendicular wall; an almost pristine reef crest and reef edge; extensive reef flat; extensive deep lagoon with coral beds and giant clams; shallow lagoon with seagrass beds, important for threatened marine turtle species; and emergent islands used by both birds and turtles.



WORLD HERITAGE NOMINATION - IUCN TECHNICAL EVALUATION

653: TUBBATAHA REEF NATIONAL MARINE PARK (PHILIPPINES)

1. DOCUMENTATION

- i) IUCN/WCMC Data Sheet (10 references)
- ii) Additional Literature Consulted: PAWB. 1991. Master Plan and Management Program for Tubbataha Reef National Marine Park, 18 p. plus appendices; Milan, Vic. 1992, NGO Assistance in National Park Management: Tubbataha. Paper presented to IV World Congress on National Parks, Venezuela; Silliman, J., 36(3) Special Issue on Tubbataha Reef, in press.
- iii) Consultations: 10 external reviewers, Philippine Government officials, Tubbataha Foundation.
- iv) Field Visit: April 1993. Jim Thorsell.

2. COMPARISON WITH OTHER AREAS

Virtually the entire coastlines of the Philippines' 7,000 islands are dotted with coral reefs. Reefs cover 27,000 sq km of the country with the largest concentration and most diverse reefs near Palawan and its satellite islands where Tubbataha is found. However, with the dependence of millions of Filipinos on reef ecosystems, there is much pressure on all reefs. A decade ago a survey indicated less than one-third of survey reefs in the country were in good condition and there has been even greater declines since then.

Various Presidential Decrees and Proclamations have been issued to establish marine parks and reserves but few of these have had much meaning as there has been no action to follow them up. In addition to Tubbataha the important marine reserves in the country are found at Hundred Islands, Santa Cruz Islands, Sumilan, Turtle Island, and El Nido. All of these, despite being marine reserves have suffered from illegal fishing, the use of dynamite and cyanide, collection of corals and shells and siltation. Because of its remoteness and due to management activities carried out through the Debt-for Nature-Swap Program by the Tubbataha Foundation, Tubbataha is considered the most intact and diverse of all the marine reserves in the Philippines.

Regionally, it has been claimed by one independent marine scientist that Tubbataha is the best example of a diverse coral-atoll system in southeast Asia (White, 1991). It certainly may be the best **documented** example as many other reefs in the region are poorly known and there may be others that eventually prove as important (e.g. those found around the Spratly Islands). Marine parks with equal diversity and abundance of fishes are found at Bunaken Marine Park in northern Indonesia, possibly Cenderwasih in Irian Jaya and certainly the Pulau Seribu marine park off Java. Another strong World Heritage marine park prospect in the region is Palau's Ngerukewid Islands Wildlife Preserve.

Comparing Tubbataha reefs with those of French Polynesia, the former has 46 genera of hard corals in 332 sq km of ocean while the latter have 51 genera in 2.5 million sq km of ocean. Tubbataha thus has a very concentrated diversity indeed!

It is, of course, unfair and impossible to compare any coral reef to that of the existing World Heritage site at the Great Barrier Reef. In this case the entire coastal region multiple use area of 3.5 million sq km as inscribed in 1981 is larger than all other Heritage sites combined. One scientist from the Great Barrier Reef Authority, however, did note that the **condition** of the reefs at Tubbataha is comparable.

In conclusion, given the extent of reef degradation in the Philippines and generally throughout the Asian region, the reefs at Tubbataha stand out as one of the best intact marine sites and thus their presence is of particular importance. This conclusion is reflected in the attraction that the area has become for Scuba divers who rate the reefs at Tubbataha as one of the world's top diving destinations.

3. INTEGRITY

The management plan for Tubbataha clearly spells out the threats that the area has been experiencing especially prior to 1989 when active management responsibility was given to the Tubbataha Foundation in a Memorandum of Agreement with DENR. The implementation of this plan has just commenced with the aid of debt-swap support and some private fund raising initiatives. It will concern the Committee, however, to note that the Government of the Philippines has not made any funds available to manage the site and the Tubbataha Foundation has even had to cover costs of Coast Guard patrols to the park.

The legislative basis for the park is adequate and the park is legally off-limits to all extractive commercial activities. The boundaries, however, are inadequate in that 2 nearby islets with submerged reefs of equal biological significance (Bastera Reef and Jessie Beazly Reef) are not included. Once a management regime for Tubbataha is in place it would be logical to consider an extension of conservation activities to these two reefs, particularly Bastera which harbours immense numbers of pelagic fish as well as abundant turtles and manta rays.

4. ADDITIONAL COMMENTS

- 4.1 Many reviewers noted that the nomination document was deficient in many aspects (missing references, misspelled scientific names and a lack of comparative data on turtles and seabirds). This has been rectified somewhat in the preparation of the IUCN/WCMC data sheet but a comprehensive publication on the reef would be a useful document.
- 4.2 Evidence of support for Tubbataha reef by the Philippine Government, outside of its legal establishment and the preparation of a management plan has been minimal. When the debt-swap funding is expired a larger commitment should be forthcoming above and beyond the assistance received from voluntary NGOs.

5. EVALUATION

Although not elucidated in the nomination, Tubbataha meets 3 criteria for natural properties. First, the site is an excellent example of a near pristine coral reef with a spectacular 100 m perpendicular wall, an almost undisturbed reef crest and reef edge, extensive lagoons with seagrass beds and coral beds, and 2 coral islands (criterion (iii)).

Secondly, the importance of Tubbataha for science and conservation is related to its unique position in the middle of the Sulu Sea where reefs contribute larvae to the whole Sulu Sea system. The opportunity to study this system of larvae dissemination and fisheries recruitment and to better understand marine processes is justification for criterion (ii).

Thirdly, the diversity of corals and fish, particularly pelagic species such as jacks, tuna, barracuda and sharks is exceptional. Added to this are the large numbers of manta rays and moray eels found here. The importance of the atolls for seabirds and turtles is less clear but it too will likely prove significant.

All contributions of integrity are met but improvements as discussed in sections three and four should accompany the decisions made by the Committee to the Philippine authorities.

6. RECOMMENDATIONS

Tubbataha meets criteria (ii), (iii) and (iv) and should be added to the World Heritage List with the two recommendations made under item 4 above.

