CONSIDERATION OF PROPOSALS FOR AMENDMENT OF APPENDICES I AND II

A. Proposal

Transfer of the population of Hawksbill Turtles (*Eretmochelys imbricata*) in Cuban waters* from Appendix I to Appendix II, pursuant to Resolution Conf. 9.24, for the exclusive and only purpose of allowing the Government of Cuba to export its stockpile of shell plates (7800kg), accumulated legally from its national conservation and management program between 1993 and 2002, annotated as follow:

a. The export will not take place until the CITES Secretariat has verified, within 12 months of the decision, that the importing country has adequate internal trade controls and will not re-export and the CITES Standing Committee accepts this verification.

b. The wild population of *E. imbricata* in Cuban waters will continue to be managed as an Appendix I species.

* *In accordance with Article I(a) of the Convention, the population for which a transfer is requested is defined as that segment of the regional Caribbean population bounded by the geographic limits of Cuban waters, which is under the jurisdiction of the Republic of Cuba, and is the exclusive area from which the shell was derived.*

B. Proponent

Republic of Cuba.

C. Supporting statement

1. Taxonomy

1.1	Class:	Reptilia
1.2	Order:	Testudinata
1.3	Family:	Cheloniidae
1.4	Species:	*Eretmochelys imbricata* (Linnaeus 1766)
1.5	Scientific synonyms:	none
1.6	Common names:	English: Hawksbill Turtle French: Tortue caret Spanish: Tortuga de carey
1.7	Code numbers:	A-301.003.003.001

2. Executive summary

2.1 Cuba protects all species of marine turtles in its waters, using similar measures to those implemented in other countries. Cuba permits a limited traditional harvest for food by local communities in two remote areas, but the harvest is strictly controlled and monitored to ensure sustainability. TRAFFIC has commended Cuba's marine turtle management program (Fleming 2001).

2.2 The shell plates of *E. imbricata* are a by-product of the domestic harvest for food. Since 1993 all the shell has been stored by the Ministry of Fishing Industries (MIP), and has not been sold in the domestic market, nor to tourists, despite Cuba holding a reservation on this species.

2.3 This proposal seeks only to export the stored shell, which requires an Appendix II listing. The shell comes from animals already removed from the population, and so there is no additional impact on the wild population.

2.4 Cuba has provided the Parties [COP10 (1997); COP11 (2000)] with evidence supporting the view that *E. imbricata* in Cuban waters are abundant, are being management responsibly, and comply with the "Criteria for the Inclusion of Species in Appendix II in Accordance with Article II, Paragraph 2.(a) (Annex 2a of Resolution Conf. 9.24)" including the "Precautionary Measures" (Annex 4 of Resolution Conf. 9.24).

2.5 The simple majority of voting Parties at COP10 (58%) and COP11 (64%) voted to transfer *E. imbricata* in Cuba to Appendix II, but not the two-thirds majority required for the transfer to be accepted. Since then, the wild population has continued to increase at 20-23% per year, providing further compelling evidence that the criteria for Appendix II are now well fulfilled.

2.6 Some Parties have expressed concern that legal trade will stimulate illegal trade. Cuba considers this improbable, but the limited trade proposed here, supervised by the CITES Secretariat, can address this issue in a way that is objective, safe and responsible.

2.7 Updated information on stocks of shell are provided (expected to be 7800 kg by November 2002), with details of Cuba's stringent control and record-keeping system, which TRAFFIC considers effective and adequate (Broad 2000).

2.8 Cuba circulated all regional Parties with a draft of this proposal seeking comment. Cuba participated fully in the CITES Regional Dialogue Meetings, shared research results, and presented a draft of this proposal. Cuba fully supports the decision of the Dialogue Meetings to develop a regional, cooperative strategy for enhancing the conservation and sustainable use of *E. imbricata* in the Caribbean.

2.9 If this proposal is approved by the Parties, Cuba will withdraw its reservation on *E. imbricata* within 90 days in accordance with Annex 4, Paragraph B3 of Resolution Conf. 9.24. Cuba will also ensure that: current commitments to *E. imbricata* conservation and management are maintained; the limit on the traditional harvest (500 individuals per year) is maintained; local communities continue to be the primary beneficiaries of the program; shell produced from the ongoing traditional harvest will be stored and not released to the domestic market; and, will not request further exports until the CITES Secretariat reports on the results of exporting the stockpile.

2.10 Cuba has made a significant commitment of resources to the conservation and sustainable use of *E. imbricata*. It has imposed precautionary harvest limits, and prohibited the domestic sale of shell. It cannot reasonably be expected to maintain this program, in its present form, without the financial benefits of selling the stockpile of shell.

3. Biological Parameters (Resolution Conf. 9.24, Annex 6.C.2)

3.1 Distribution (Resolution Conf. 9.24, Annex 6.C.2.1)

3.1.1 General

Eretmochelys imbricata occur within 100+ nations and nest in at least 60 (Witzell 1983; Groombridge and Luxmoore 1989; Marquez 1990; Meylan and Donnelly 1999). There is an extensive literature on their general biology (eg Lutz and Musick 1996; Rhodin and Pritchard

1999; ROC 1998, 2000a; Frazier 2001; IUCN/SSC/MTSG 2002a). They favour inshore waters with coral reef ecosystems and feed mainly on sponges (Witzell 1983; Meylan 1988; Anderes 1994, 1996; Anderes and Uchida 1994; Bjorndal 1990, 1997). The global population is separated into genetically distinct regional populations (Okayama *et al*. 1999). In optimal habitat, *E. imbricata* appear to live in high densities, grow fast and often nest locally. In other areas densities may be low, grow rates slow, and extensive travel may be required for nesting (Limpus 1992). Despite a similar biology throughout their range, natural history traits and population dynamics are highly variable within and between subpopulations (Carrillo *et al*. 1998e; ROC 2000a; Frazier 2001; IUCN/SSC/MTSG 2002a).

3.1.2 Caribbean

Eretmochelys imbricata are widely distributed in the Caribbean (Witzell 1983; Groombridge and Luxmoore 1989; Marquez 1990; Meylan and Donnelly 1999), but the extent of the population and habitat in different countries is and always has been highly heterogeneous (see Section 3.2.2). Nations with little habitat have never contained large populations of *E. imbricata* and they produced as little as 25 kg of shell per year historically (1973-83). Nations with extensive habitat, like Cuba, contained large wild populations and exported over 5000 kg of shell per year from their own waters (Groombridge and Luxmoore 1989). The majority of the regional population exists in the territorial waters of the nations with the largest amounts of habitat. Areas north of 24ºN (Bermuda, USA, northern Bahamas) do not support significant nesting (Meylan *et al*. 1995; Meylan 2001).

3.1.3 Cuba

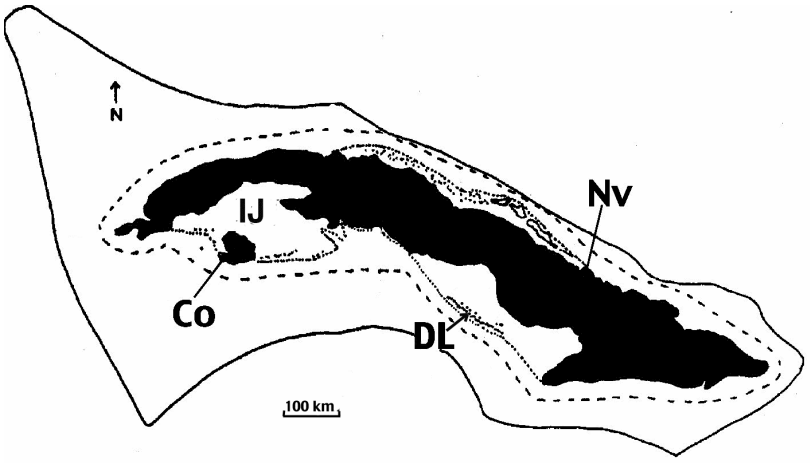

Figure 1. Cuba and its territorial waters (dashed line) and exclusive economic zone (solid line). The 20 m depth contour (dotted line; 44,076 km^2) indicates the extent of shallow waters where coral reefs are most abundant. Nesting is most abundant in the Doce Leguas region (DL). The two traditional harvest sites are at Nuevitas (Nv) in the northeast, and Cocodrilos (Co) on the Isle of Youth (IJ; formerly Isle of Pines), in the southwest.

Eretmochelys imbricata are found throughout Cuban waters [370,630 km^2 (Carrillo and Contreras 1998); Fig. 1] where they are common, abundant and secure. Extensive areas in the south, with warm sheltered waters, support high densities of *E. imbricata* juveniles on extensive feeding grounds (ROC 2000a). Here *E. imbricata*, grow fast, mature early (7-8 years first females mature; 16-17 years 100% of females mature)(IUCN/SSC/MTSG 2002a), and many adult females live and nest locally (ROC 1998, 2000a). The population is not fragmented but rates and patterns of immigration and emigration are poorly known. The population is dominated by individuals with shared Cuban haplotypes, superimposed on

which are different mixes of less common haplotypes, some known only from nesting areas outside Cuba (Diaz-Fernandez *et al*. 1999; Carrillo *et al*. 1999). Bass (1999) estimated that 67% of *E. imbricata* caught in Cuba's harvest may have come from nests in Cuba. New nesting haplotypes (Mexican) recently found in southwest and northern Cuba can be expected to increase that estimate. She also concluded that Cuba may contribute *E. imbricata* to wild populations in some nearby countries. Some individuals tracked from the traditional harvest site by satellite did disburse to other parts of the Caribbean (Manolis *et al*. 1998; Carrillo *et al*. 1999; Prieto *et al*. 2001). *Eretmochelys imbricata* tagged in other countries are occasionally recovered in Cuba. Seven nesting females in Cuba have been tracked by satellite; five remained in Cuba after nesting and two travelled to Honduras. None of 28 adult nesting females recently fitted with satellite tracking transmitters in various parts of the Caribbean (Antigua, Barbados, Belize, Jamaica, Costa Rica, Mexico, Nicaragua, Puerto Rico, US Virgin Islands) has been reported as venturing into Cuban waters (IUCN/SSC/MTSG 2002a).

3.2 Habitat Availability and Status (Resolution Conf. 9.24, Annex 6.C.2.2)

3.2.1 General

Eretmochelys imbricata are associated with, but not restricted to, coral reef habitats. There is an estimated 284,300 km^2 of shallow coral reefs worldwide (Spalding *et al*. 2001), 58% of which are considered to be under medium-high threat (Bryant *et al*. 1998). *Eretmochelys imbricata* occupy many areas away from these coral reefs, but there has been little research in such areas. Adult females nest on mainland beaches and/or on offshore islands and keys. The status of these nesting sites varies from country to country (Groombridge and Luxmoore 1982; Groombridge 1992; Meylan and Donnelly 1999).

3.2.2 Caribbean Region

Spalding *et al*. (2001) estimate there are about 22,000 km^2 of shallow coral reefs in the Caribbean; some 20,000 km^2 if marginal areas for *E. imbricata* are excluded. Juvenile *E. imbricata* are commonly associated with shallow coral reefs (Pritchard 1996; Diez and Van Dam 2002). The results of satellite tracking (eg Horrocks *et al*. 2001) indicate many adult females do not live on the shallow reefs and can reside in waters up to 50 m in depth. When the results of Spalding *et al*. (2001) are used as an index of *E. imbricata* habitat, it suggest over half the habitat in the Caribbean is restricted to five nations (Bahamas, Cuba, Mexico, Jamaica, Belize). These nations provided much of the historical trade (Groombridge and Luxmoore 1989), and may always have contained the majority of the regional Caribbean population of *E. imbricata*. Local abundance on nearby reefs can vary greatly (eg Diez and Van Dam 2002), suggesting carrying capacity may be highly variable within and between areas. Historical trade (mean kg shell exported/ km^2 of shallow coral reef/year) also varied significantly from country to country (eg Bahamas 0.31 versus Grenada 1.18) which may also reflect different carrying capacities for juveniles and adults.

3.2.3 Cuba

Cuba and its 2000 + islands and atolls are the largest island complex in the Caribbean. They contain extensive areas of shallow (< 20 m) inshore waters occupied by *E. imbricata* (44,076 km^2; Carrillo and Contreras 1998), 77% of which are in the south, where conditions appear optimal: densities are high (ROC 2000a); growth rates high (Carrillo *et al*. 1998e; IUCN/SSC/MTSG 2002a); and, maturity is reached at early ages (IUCN/SSC/MTSG 2002a). Spalding *et al*. (2001) estimate there are 3020 km^2 of shallow coral reef, which is a reduction on the previous estimate (WCMC 1999; ROC 2000a). *Eretmochelys imbricata* occupy many areas outside the reefs mapped by Spalding *et al*. (2001). In addition, the Cuban platform is surrounded by 3966 km of deep shelf which has abundant marine cliff

faces: a favoured habitat of *E. imbricata* (Diez and Van Dam 2002). The depth of the shelf (< 2 + km; Carrillo and Contreras 1998) may serve as a partial barrier to emigration from the Cuban platform, because it is well beyond the feeding depth of *E. imbricata* [50-60 m is considered beyond the "comfort" zone (Horrocks *et al*. 2001)]. Marine habitats in Cuba, including coral reefs, are internationally recognised as being in good condition (WCMC 1999; Spalding *et al*. 2001; Benchley 2002) and are subject to ongoing monitoring (IDO 2000). The main nesting areas for *E. imbricata* are in the south around the Doce Leguas Keys (Fig. 1), where development is strictly limited and subject to environmental impact assessment (ROC 1998, 2000a; Moncada *et al.* 1998a, 1999).

3.3 Population Status (Resolution Conf. 9.24, Annex 6.C.2.3)

3.3.1 Global Status

Eretmochelys imbricata is distributed around the world, between approximately 30°N and 30°S. The global population exists as a mosaic of small and large subpopulations, in more than 100 countries, with different levels of historical abundance and depletion. Some reefs appear never to have supported high densities of *E. imbricata* and cannot be expected to do so in the future (Limpus 1992). Others obviously support high densities (Diez and Van Dam 2002; ROC 2000a). There are many areas where wild populations are depleted and are not being given the opportunity to recover (ROC 2000a; Meylan and Donnelly 1999). Subsistence use to alleviate poverty is often responsible (ROC 2000a). It is not valid to assume that the worst examples of status apply to the global population as a whole (Hilton-Taylor 2001; Mrosovsky 2002). Many nations have afforded *E. imbricata* high levels of stewardship and their wild populations are secure, stable or increasing - sometimes rapidly (Mrosovsky 2000; Meylan 2001; see Section 3.3.2 below). The status of the global wild population as a whole is difficult to quantify with any confidence, but it involves hundreds of thousands if not millions of individuals, with some notably secure populations (ROC 2000a). No authority seriously considers the species is at risk of biological extinction at the global level, despite problems in some local populations and regions (Meylan and Donnelly 1999; Mrosovsky 2000; ROC 2000a; Webb and Carrillo 2000).

The IUCN (Hilton-Taylor 2001) concluded that the global population of *E. imbricata*, when considered as a single unit in 1996, may have been reduced by 80% relative to 1891 (105 years earlier). They rejected claims by Meylan and Donnelly (1999) that this decline was ongoing. Status in 2002 is yet to be assessed and will need to account for well documented increases in the wild population in some regions since 1996 (eg Section 3.3.2 below). The 1995 IUCN Criteria used by Hilton-Taylor (2001) have been revised because they did not give realistic assessments of threat for widely distributed marine species subject to deliberate harvest. It is unfortunate that the 1995 criteria resulted in "critically endangered" being applied to a species with no measurable risk of biological extinction at the global or species level (Mrosovsky 2000; Webb and Carrillo 2000). The CITES criteria (Resolution Conf. 9.24), are perhaps better able to reflect the real status of *E. imbricata*.

3.3.2 Status in the Caribbean Region

Nest monitoring programs from 7 widely distributed nations (Table 1) demonstrate trends between 1990 and 2001. Total annual nesting in these countries [10,000 + nests annually (1999-2001)], all with high levels of stewardship, may represent 75% of all Caribbean nesting [based on Meylan (2001) and IUCN/SSC/MTSG (2002b)]. The mean rate of increase for the 7 nations is 15,6 $\pm$ 4,6% per year (r = 0,14 $\pm$ 0,04), and the combined population has been increasing at an estimated 19,1% per year (1997-2001). This is an index of the rate at which about 75% of the adult female population in the Caribbean may be increasing. Adult females appear to comprise a small percentage (< 5%) of the total *E. imbricata* population (CCMA 1998), and they nest each 2-3 years, with an average of about 3 nests

per year (Frazier 2001). The sex ratio of wild *E. imbricata* populations is highly biased to females [77% of the adult population (Carrillo *et al*. 1998c)].

Table 1. *Eretmochelys imbricata* nest survey results from 7 nations in the Caribbean (IUCN/SSC/MTSG 2002b), with the intrinsic rates of increase (r) and mean annual percentage rates of increase for each site. An estimate of the percentage rate of increase for the combined population, as a single entity, is derived (+19.1% per year: 1997-2001). * = partial counts (excluded from calculations of r).

	Mexico	USVI	Antigua	Puerto Rico	Cuba	Costa Rica	Barbados	Totals **(Means)**
1990	826	79	77	196	-	3	-	1181
1991	1053	119	139	142*	-	1	-	1454*
1992	1282	88	114	142*	-	4	-	1630*
1993	1891	101	107	-	-	0	-	2099
1994	2563	118	109	308	-	4	-	3102
1995	3690	135	126	157*	-	2	-	4110*
1996	4522	114	82	354	-	12	-	5084
1997	2671	85	94	475	34	10	328	3697
1998	4701	121	117	503	32	9	515	5998
1999	6395	94	120	511	70	12	717	7919
2000	5746*	65	113	541	45	9	807	7326*
2001	3969	143	159	549	72	18	1179	6089
% annual increase	0.171	0.005	0.021	0.099	0.184	0.198	0.301	**(0.140)**
% nests in survey area	18.6%	0.5%	2.1%	10.4%	20.2%	21.9%	35.1%	**(15.5%)**
Est. nests/year (1997-2001)	80%	80%	80%	50%	3.2%	5%	80%	(54.0%)
% of total nests (7 nations)	5871	127	151	1032	1581	232	887	9881
Predicted increase (nests/y)	59.4%	1.3%	1.5%	10.4%	16.0%	2.3%	9.0%	100%
% of total increase	1092	1	3	107	319	51	311	1884 **(19.1%)**
% annual increase	58.0%	0.0%	0.2%	5.7%	16.9%	2.7%	16.5%	100%

3.3.3 Status in Cuba

3.3.3.1 General

The shell to be exported has been derived exclusively from Cuba's management program. Between 1968 and 1990 there was a managed harvest of *E. imbricata*, which sustained an average take of 4744 individuals per year (Fig. 2) with similar fishing effort (ROC 1998). The harvest was voluntarily phased down (1991-1994) for economic and conservation reasons (ROC 1998, 2000a). Since 1995 all marine turtles have been protected in Cuban waters and the only harvest permitted has been a traditional harvest, by local communities, in two remote parts of Cuba. A maximum limit of 500 individuals per year has been imposed [mean real annual harvest = 410,0 $\pm$ 26,2 (SE); N = 7; 1995-2001]. Since 1993 the shell obtained in Cuba has been stored and not exported.

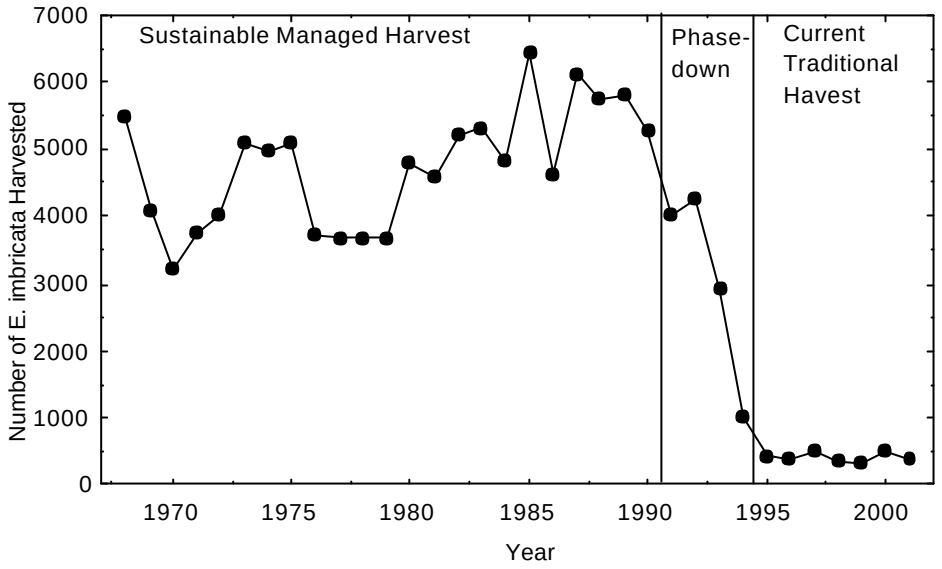

Figure 2. Cuba voluntarily phased down its historical harvest of *E. imbricata* to meet changed economic circumstances and increase its contribution to regional conservation efforts after joining CITES in 1990.

For the purpose of assessing status, the CITES definition of "decline" (Resolution Conf. 9.24, Annex 5) excludes deliberate, managed reductions of a wild population implemented to extract a sustainable yield. The wild population in 1990 was estimated to be around 111,000 individuals (CCMA 1998), with a stable size structure in some areas but not in others (Carrillo *et al*. 1999). The population was expected to increase after the phase down in the harvest (a 90% reduction) and stabilise at a new level (ROC 1998). Monitoring results indicate the wild population is increasing, which confirms the traditional harvest is being sustained, is precautionary, and is well within safe limits.

3.3.3.2 Trends in Nesting

Between 1997 and 2001, standardised nest surveys in the Doce Leguas area (Fig. 1), between October and December (92 days), on 9 beaches, showed a mean increase of 20,2% per year [intrinsic rate of increase (r) = 0,184 (Table 1)]. Mean density of nests found increased from 3,01 $\pm$ 0,10 per km (1997-98) to 5,68 $\pm$ 0,80 per km (1999-2001), with search effort reasonably stable at 45,9 $\pm$ 5,1 days (SE) per year.

3.3.3.3 Trends in Clutch Size

Clutch size (CS) provides a broad index of the size of nesting females. Between 1988 and 1996 CS was constant [mean = 135,3 $\pm$ 0,75 (SE): N = 9 years] and small clutches (< 90 eggs), indicating small females, were rare [2,7 $\pm$ 1,5% (SE) of clutches per year]. Between 1997 and 2001, the percentage of clutches with less than 90 eggs has increased (11,5 $\pm$ 1,5%) causing mean CS to decrease (132,6 $\pm$ 2,23; N = 5). This is consistent with increased recruitment of younger females into the nesting population.

3.3.3.4 Trends in the Average Size of Turtle

At both traditional harvest sites, Cocodrilos on the Isle of Youth (IJ) and at Nuevitas (Nv) on the northern coast (Fig. 1), the mean size of *E. imbricata* caught has been steadily increasing (Fig. 3).

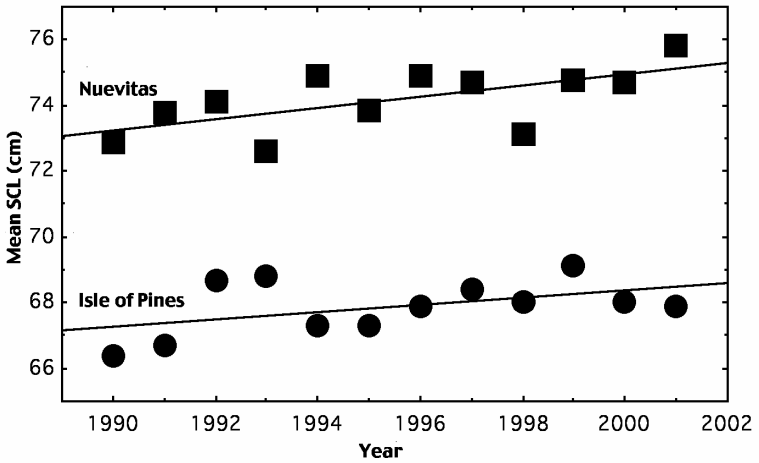

Figure 3. Mean size (SCL) of *E. imbricata* landed at the Isle of Youth (p = 0,12) and Nuevitas (p = 0,03) since 1990. Lines indicates trends.

3.3.3.5 Trends in Abundance at Isle of Youth

At the Isle of Youth (IJ), traditional turtle fishermen are allocated a set number of nets and boats. Fishing occurs in the same areas annually, in the same months, and fishing effort is measured daily. Catch per unit effort (CPUE) is calculated as the number of turtles caught per 100 net days in the season. Fishing effort was greatly reduced up to 1997, but since then has been reasonably constant. From 1997 onward, CPUE has increased at 23,2% per year (r = 0,21) which corresponds with a marked increase in abundance reported by fishermen. Up to 1996, fishermen claimed that within living memory (back to 1940s), the CPUE of *E. imbricata* was low but relatively constant (ROC 1998). This increase may reflect increased movement from the main foraging areas in the south, which now contain high densities of resident juveniles (ROC 2000a). The mean size of turtle caught at IJ is small (Fig. 3; 67,9 cm SCL and 39,7 kg BWt in 2001) relative to the mean size caught on the north coast at Nuevitas.

3.3.3.6 Trends in Abundance at Nuevitas

Fishing effort at the four capture sites at Nv (Fig. 1) has been recorded since 1997. Each site is fished by a different community, and effort has varied within and between sites and years. CPUE rates of increase (1997-2001) ranged between + 0,002 and + 0,372 with a mean of 0,18 $\pm$ 0,08 (SE): 20.3% per year. The fishermen did not report the same major increase in abundance (1996 to 1997-98) which occurred at IJ. The Nv capture sites are well distanced from the main juvenile foraging grounds in the south, and intercept larger animals (Fig. 3; 75,8 cm SCL and 46,4 kg BWt in 2001) moving from west to east along the coast, inshore of the Cuban shelf (ROC 2000a).

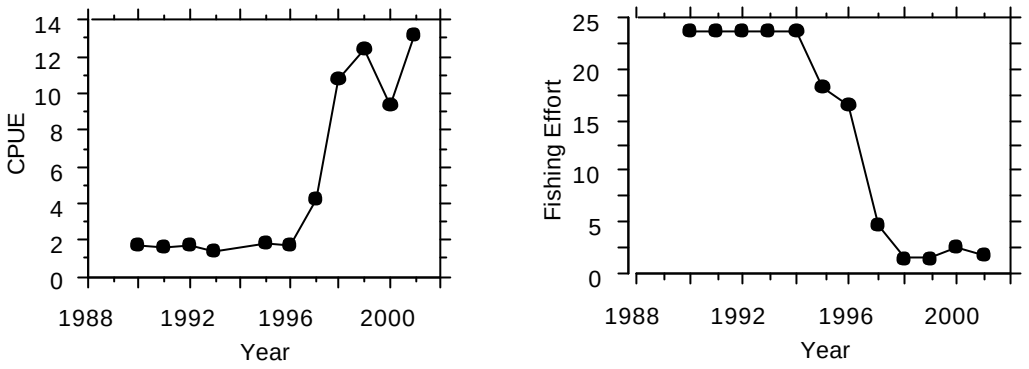

Figure 4. Catch per unit effort (CPUE: turtles caught per 100 netdays) and fishing effort (in 1000's of netdays) for *E. imbricata* at the Isle of Youth (1990-2001).

3.3.3.7 Trends in Sex Ratio

The sex ratios (proportion of females) of *E. imbricata* reported from IJ [0,843 ± 0,013 (SE); N = 6 years (1996-2001)] and Nv [0,737 ± 0,010 (SE); N = 5 years (1997-2001)] are different from each other, but have both been constant over time, suggesting no sex-specific harvest impact at either site.

3.3.3.8 Densities

Densities around some coral reefs in southern Cuba, at Doce Leguas (122-280 per km^2) and at the Isle of Youth (59 per km^2) (ROC 2000a) are high relative to other published values (eg Limpus 1992; Diez and Van Dam 2002), but have not been monitored over time.

3.3.3.9 Status: General Conclusions

Between 1996-97 and 2001, the measured rates of increase in abundance of nests (+20,2%), abundance in the wild at IJ (+23,2%) and abundance in the wild at Nv (+20,3%) all provide consistent and compelling evidence for the traditional harvest being sustainable. In addition, the mean size of *E. imbricata* caught is increasing, sex ratio has been constant over time, and there has been a 6 times increase in the number of small females being recruited into the nesting population.

3.3.3.10 Captive Population

The captive *E. imbricata* population in Cuba is small (N = 115 at 31 December 2001), and involves mostly individuals at the experimental ranching station at the Isle of Youth.

3.4 Population Trends (Resolution Conf. 9.24, Annex 6.C.2.4)

See Section 3.3 above.

3.5 Geographic Trends (Resolution Conf. 9.24, Annex 6.C.2.5)

No national populations of *E. imbricata* appear extinct, despite serious depletion in some nations (Meylan and Donnelly 1999). There has been no geographic reduction of *E. imbricata* range in Cuba

and the main nesting areas identified in the 1500s and 1600s, at Doce Leguas keys, are still the main ones used today (Moncada *et al*. 1999).

3.6 Role in the Ecosystem (Resolution Conf. 9.24, Annex 6.C.2.6)

Cuban coral reefs are in good condition (Spalding *et al*. 2001; Benchley 2002), and do not appear to have been adversely affected by low densities of *E. imbricata* during hundreds of years of harvesting. This suggests high densities of *E. imbricata* are not critical to maintaining healthy reefs (Hill 1998). Even though *E. imbricata* play a role in reef ecology, their importance may be minor relative to threats from bleaching, contamination, siltation, etc.

3.7 Threats (Resolution Conf. 9.24, Annex 6.C.2.6)

The population of *E. imbricata* in Cuban waters is not threatened by the current traditional harvest. The wild population is expanding rapidly while the harvest occurs, indicating harvest levels are precautionary and well within safe levels. Given the historical harvest of 4744 individuals per year was maintained over many years (Carrillo *et al*. 1999), it should not be surprising that a harvest of 410 per year (< 10%) would be easily sustained. Human activity is restricted on offshore nesting beaches, and the taking of eggs and turtles is prohibited by law. Some illegal take occurs from time to time. Mortality due to incidental catch has increased (see Section 4.1.1), but is not considered detrimental to the wild population. International trade is not a current threat.

4. Utilisation and Trade (Resolution Conf. 9.24, Annex 6.C.3)

4.1 National Utilisation (Resolution Conf. 9.24, Annex 6.C.3.1)

4.1.1 General

The traditional harvest at IJ and Nv has been described in depth (ROC 1998, 2000a; Carrillo *et al*. 1999). Turtle fishing is the main economic activity for local communities at both sites, and the meat, for human consumption, is the primary product of the harvest. The shell is a by-product. A maximum annual quota of 500 *E. imbricata* has existed since 1995, and the mean annual harvest has been 410,0 $\pm$ 26,2 (SE) individuals.

Each turtle landed is assigned a unique field identification number (FIN) coded for capture site and year (eg IP/96/001) which is written on the shell, and on a data sheet with measurements and observations on reproductive status for that individual turtle. Data are sent to the Ministry of Fishing Industries (MIP). Shell plates are separated by water maceration, weighed and packed in plastic bags provisionally sealed with the FIN, and then forwarded to the central store at Cojimar (Habana) for processing and storage (see Section 4.1.2). Shell plate scrapings from each animal are taken to provide a bank of material for DNA analysis.

In Cuba, as elsewhere in the world, incidental catch of *E. imbricata* provides management authorities with a dilemma. Restricting fishermen from utilising legal by-catch is not desirable, but neither is the creation of commercial incentives likely to promote deliberate harvesting. If turtle populations increase greatly because of conservation action, so incidental catch also increases. In Cuba, mortality due to incidental catch was estimated as 100-200 *E. imbricata* per year in 1997 (ROC 1998). A recent review (Moncada *et al*. 2002) suggests it has now increased to 300-400 per year: mainly juveniles (< 40 cm SCL) caught in inshore fishing nets.

At the two traditional harvest sites, incidental catch is considered part of the harvest quota and is processed accordingly (although it is separately identified). Elsewhere, shell derived from incidental catch cannot be legally traded or sold and should be discarded, although

some illegal use of shell occurs from time to time. There are no avenues through which shell derived through incidental catch outside the two harvest areas can enter the stockpile of shell for export.

4.1.2 Management Stocks of Shell in Cuba

The Cojimar store is controlled and managed by MIP. All individual pieces of shell, for each individual, and the CITES label allocated to that turtle, are photographed with a digital camera. The CITES label (ROC 1998, 2000a,b) serves as a tag and is uniquely numbered, non-reusable and cannot be duplicated. Shell pieces are re-packed into a plastic bag which is double heat-sealed (double seams), and packed in a second bag, also double heat-sealed, to which the CITES label is adhered. Shell prior to 1997 is of mixed origin and is specified as "RESERVA ACUMULADA" ("STOCKPILE") on the CITES labels. Labels contain information on the weight of shell in each bag, and can be cross-referenced directly to the FIN applied in the field. The digital images allow scutes from individual turtles to be identified by size, shape and colour pattern (Carrillo *et al*. 1998e). For security reasons, copies of the image database are maintained at Cojimar, MIP and the CITES Management Authority: CITES labels are held by the Management Authority. The shell store has restricted access and is under 24-hour security surveillance.

Cuba intends to export all management stocks of shell accumulated up to 31 October 2002 (estimated as being up to 7800 kg) in one shipment. The CITES Secretariat is invited to oversee the final packing and export, to check bag contents against security images, to advise on exactly how it would like the shipment to be undertaken, and to supervise the export to the degree it considers appropriate.

4.1.3 Management of Shell in the Importing Country

Cuba has no jurisdiction in this matter and considers the CITES Secretariat, on behalf of the Parties, needs to evaluate and verify controls in potential importing countries. Cuba will not export until it is satisfied, through the CITES Secretariat, that the controls in the importing country are adequate to ensure legal trade from Cuba does not encourage illegal trade, or undermine in any way the conservation and management programs for *E. imbricata* implemented by other Parties. Prior to export, Cuba will provide the CITES Secretariat and CITES Management Authority of the importing country with full documentation and copies of the digitised security images of all shell being exported. Cuba will follow any reasonable protocol for export suggested by the CITES Secretariat and approved by the CITES Standing Committee.

4.2 Legal International Trade (Resolution Conf. 9.24, Annex 6.C.3.2)

Exports of *E. imbricata* from Cuba in the past (Carrillo *et al*. 1998b, 1999) were restricted to shell for commercial purposes. Legal international trade is currently restricted to export of small numbers of specimens, mostly tissue samples, for various research purposes.

4.3 Illegal International Trade (Resolution Conf. 9.24, Annex 6.C.3.3)

Illegal trade in *E. imbricata* mostly comprises tourists purchasing small items made and sold by local people, and then crossing international borders with them, largely in ignorance. Since 1993, legal trade has declined from tonnes of shell per year for commercial purposes, which involved thousands of animals, to kilograms per year. CITES infraction data indicate illegal international trade is decreasing (ROC 2000a), and occurs mainly outside the Caribbean region.

4.4 Actual or Potential Trade Impacts (Resolution Conf. 9.24, Annex 6.C.3.4)

4.4.1 Effects of Legal Trade

Trade from Cuba will not stimulate harvesting within or outside Cuban waters, but rather will encourage responsible management. Existing laws in Cuba impose heavy penalties relative to the average monthly salary, for unlicensed harvest, trade and/or transport of marine turtles or their products, and provides for confiscation of equipment and suspension of fishing/trading licences if appropriate.

4.4.2 Benefits of Trade

Cuba's program of conservation and sustainable use of *E. imbricata* complies with the fundamental principles of the Convention on Biological Diversity, is consistent with the IUCN Policy on Sustainable Use (Resolution 2.29), and follows directions highlighted in both Resolution Conf. 8.3 ("Benefits of Trade") and Goal 1 (Objective 1.1) of the CITES Strategic Review (CITES 2001). Trade is essential to provide the economic incentives and resources needed to sustain Cuba's commitment to *E. imbricata* conservation, management and research.

Cuba lifting its reservation and exporting shell to a country which will not re-export, is a safe strategy of trade relative to using the shell domestically and selling manufactured products locally. Cuba is prepared to maintain a high budget commitment to *E. imbricata* research and management, but needs the ability to trade. The local communities which carry out the traditional harvest have complied with all domestic controls, and deserve to be rewarded for their efforts. At a biological level, there is no doubt that Cuba's program is providing new and valuable insights into the population dynamics and sustainable use of *E. imbricata*, which are contributing significantly to the global knowledge base on this species.

4.4.3 Reporting

In compliance with Article VIII of the Convention, Cuba will provide the CITES Secretariat with a full report on the shell exported.

4.5 Captive Breeding or Captive Propagation for Commercial Purposes (Outside Countries of Origin) (Resolution Conf. 9.24, Annex 6.C.3.5)

No significant captive breeding of *E. imbricata* for commercial purposes is known to occur within or outside range States.

5. Conservation and Management (Resolution Conf. 9.24, Annex 6.C.4)

5.1 Legal Status (Resolution Conf. 9.24, Annex 6.C.4.1)

5.1.1 National (Resolution Conf. 9.24, Annex 6.C.4.1.1)

The history of legal controls on *E. imbricata* in Cuba, and the details of all active legislation, have been provided by Carrillo *et al*. (1998a), and ROC (2000a). Cuba's legislation has proved effective in maintaining protected areas and in controlling and regulating the traditional harvest.

5.1.2 International (Resolution Conf. 9.24, Annex 6.C.4.1.2)

According to the CITES Secretariat (ROC 1998) there is no intergovernmental organisation responsible for coordinating international utilisation of marine turtles within national fisheries waters: it is a sovereign right of each nation.

Groombridge and Luxmoore (1989) review the world status and management of *E. imbricata*, and provide information on protection measures at the national level. CITES has clearly been effective in restricting illegal international trade. According to Groombridge and Luxmoore (1989), 36 of 38 nations in the Caribbean had legislation aimed at regulating and/or restricting utilisation and trade in *E. imbricata*. Of the nations with blanket protection, various forms of subsistence use and domestic trade still occur (Fleming 2001).

Cuba's extensive efforts to promote regional cooperation are summarised in ROC (2000a). Cuba has hosted many regional meetings to explain it's management program and foster increased regional cooperation. Cuba and Mexico have cooperated in marine turtle conservation, management and training since the 1970s, and signed a bilateral agreement concerning that cooperation in 1999. Cuba signed and ratified the SPAW Protocol of the Cartagena Convention, and contributed to discussion on the InterAmerican Convention for the Conservation and Protection of Sea Turtles. Cuba was a founding member of the Caribbean Turtle Management and Research Group (CTMRG), which fostered training and dialogue among participating Caribbean nations. Cuba was an active participant in the CITES Regional Dialogue Meetings on *E. imbricata* (2001, 2002), and participated fully in working groups established to review current status and monitoring protocols.

Cuba has attended and presented information at a large number of forums, including the Latin American Sea Turtle Specialists and International Sea Turtle Symposia. It has published detailed accounts of its management program (eg ROC 1998; Carrillo *et al*. 1999; Moncada *et al*. 1999), and has continually solicited transparent international review of its program [eg IUCN, CITES, TRAFFIC, EU and various Parties (see ROC 2000a; Broad 2000; Fleming 2001)].

5.2 Species Management (Resolution Conf. 9.24, Annex 6.C.4.2)

Groombridge and Luxmoore (1989) and Meylan and Donnelly (1999) summarise information on the management of *E. imbricata* throughout their global distribution. Fleming (2001) provides a recent detailed review for some Caribbean nations.

5.2.1 Population Monitoring (Resolution Conf. 9.24, Annex 6.C.4.2.1)

See Section 3.3.

5.2.2 Habitat Conservation (Resolution Conf. 9.24, Annex 6.C.4.2.2)

Groombridge and Luxmoore (1989) and Meylan and Donnelly (1999) discuss current threats. Marine habitats are unlikely to be limiting although local populations in some countries may be affected by habitat degradation (NOAA 1999). There is increased international awareness (IUCN 1995) of the need to integrate beachfront development with responsible management of marine turtle nesting habitats, although it remains a widespread problem. Large tracts of *E. imbricata* habitat now lie within marine protected areas, ensuring large populations of *E. imbricata* are secure and safe (also see Section 3.2).

5.2.3 Management Measures (Resolution Conf. 9.24, Annex 6.C.4.2.3)

The levels of management applied to *E. imbricata* within range States varies greatly (Groombridge and Luxmoore 1989). Subsistence use remains common, which leads to domestic trade in shell by-products (Groombridge and Luxmoore 1989). Management in Cuba varies from that in most countries in that the limited wild harvest is strictly controlled by the State.

5.3 Control Measures (Resolution Conf. 9.24, Annex 6.C.4.3)

5.3.1 International Trade (Resolution Conf. 9.24, Annex 6.C.4.3.1)

International trade in *E. imbricata* products from Cuba can be strictly controlled because Cuba is an island nation without common land borders. The marking system for shell (Section 4.1) is secure. The notion that legal trade will promote illegal trade is neither logical nor convincing, and it is now well established that the opposite is the case (Hutton *et al*. 2002). Legal trade undermines the incentives and economic base of illegal trade.

5.3.2 Domestic Measures (Resolution Conf. 9.24, Annex 6.C.4.3.2)

Within Cuba, strong domestic controls on the use of *E. imbricata* have been in place since the 1960ís (Carrillo *et al*. 1998a). Domestic controls in other nations are highly variable (Groombridge and Luxmoore 1989).

6. Information on Similar Species (Resolution Conf. 9.24, Annex 6.C.5)

The shell plates of *E. imbricata* can be readily distinguished from those of other species due to shape, thickness and colour: the marking system adds additional security. Chemical and biochemical analyses (Sakai and Tanabe 1995; Sakai *et al*. 1995; Tanabe and Sakai 1996; Moncada *et al*. 1998b), including mtDNA analysis (Bass 1999; Diaz-Fernandez *et al*. 1999; Okayama *et al*. 1999) could all be used to establish the Cuban origin of shell samples if required.

7. Other Comments (Resolution Conf. 9.24, Annex 6.C.6)

Cuba has consulted with and sought constructive criticism from a wide range of regional Parties and international technical experts about its conservation and management program for *E. imbricata.* A draft of this proposal was sent to range state countries: Antigua and Barbuda, Barbados, Bahamas, Jamaica, Saint Kitts y Nevis, Dominique, France, Guadaloupe, Martinique, United Kingdom, Cayman Islands, Bermudas, British Virgin Islands, United States of America, Puerto Rico, U.S. Virgin Islands, Saint Lucia, Trinidad and Tobago, Netherlands, Netherlands Antilles, Saint Vincent and Grenadines, Belize, Colombia, Costa Rica, Dominican Republic, Guatemala, Nicaragua, El Salvador, Panama, Mexico, Honduras y Venezuela, from April 10th to 15th. In addition, a summary of the proposal was presented to all Parties attending the Second CITES Regional Dialogue Meeting (May 2002).

Comments have been received from Costa Rica, U. S.A., Venezuela and Barbados, which are enclosed. It is considered that the proposal gives substantial information and arguments to response them.

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Comments received

1. Costa Rica

MINISTERIO DEL AMBIENTE Y ENERGÍA
SISTEMA NACIONAL DE AREAS DE CONSERVACIÓN
DIRECCION GENERAL

31 May 2002
SINAC-DG-974

Silvia Alvarez Rossell
Directora
Centro de Inspección y Control Ambiental
Autoridad Administrativa CITES
Cuba

Estimada Señora:

Damos respuesta a nota enviada por su persona, con fecha del 10 de abril de 2002, para que Costa Rica realizara un análisis de la propuesta de Cuba para trasladar a la tortuga carey del Apéndice I al Apéndice II de CITES.

Luego de un análisis realizado por las Autoridades Administrativas, Autoridades Científicas y ONGs relacionadas con la investigación de esta especie, se le hacen las siguientes observaciones al documento de la propuesta:

- Transferir a la tortuga Carey del Apéndice I al Apéndice II, aun temporalmente sería promover la continua acumulación y exportación de escama de tortugas carey por parte de otras naciones. Se ha documentado escama acumulada en otros países en la región Caribe, por ejemplo Jamaica.

- En el 2002, la UICN reconfirmo la clasificación de la Tortuga Carey como En Peligro Crítico correspondiendo a un declive de por lo menos 80% durante las últimas tres generaciones.

- Transferir a la Tortuga Carey del Apéndice I al Apéndice II, para que Cuba pueda exportar escama, sería mantener el comercio de escama de carey, el cual ha sido la razón principal de la declinación de las poblaciones de tortuga carey.

- Estudios genéticos de tortugas carey en las áreas de desove y alimentación en el Caribe, indican que las tortugas carey capturadas en las aguas cubanas, se originan de varias poblaciones anidadoras de la región. Por lo tanto, la caza de tortuga carey en Cuba, podría afectar a las poblaciones de todo el Caribe.

- Los esfuerzos de conservación de tortugas marinas han aumentado en los últimos años en muchos países del Caribe con el propósito de revertir el declive de la especie. Transferir la Tortuga Carey del Apéndice I al Apéndice II para que Cuba pueda exportar escama, sería un mensaje a los demás países de la región, de disminuir los esfuerzos de conservación de la tortuga carey, ya que Cuba efectivamente aprovechará los frutos de los esfuerzos de conservación de los demás países.

- La Tortuga Carey, así como otras especies de tortugas marinas, duran un tiempo considerable para llegar a la madurez sexual. Los datos presentados por Cuba para justificar el re-abrir el comercio de escama de carey, se refiere a aumentos poblacionales de solamente algunos años. Es insuficiente llegar a conclusiones usando datos de tan corto plazo, los cuales ni siquiera incluyen una generación. Todos los datos de carey en el Caribe a largo plazo (30 + años) indican una declinación poblacional.

Sin mas por el momento quedo a sus ordenes para cualquier consulta.

Atentamente,

Zayda Trejos Esquivel
Directora General

Autoridad Administrativa CITES

C: Carlos Manuel Rodríguez, Ministro MINAE
Raúl Solórzano, Director Superior de Recursos Naturales
Ricardo Ulate, Director de Cooperación Internacional
Jenny Asch. Coordinadora Técnica
Carlos Calvo, Coordinador a.i. Fomento
Juan Rodríguez. Coordinador CITES
José Joaquín Calvo. Encargado de Vida Silvestre

2. Estados Unidos de América.

In Reply Refer To:
FWS/AIA/DSA

Dr. Silvia Alvarez Rossell
Directora, Centro de Inspección y Control Ambiental
Ministerio de Ciencia Tecnológica y Medio Ambiente
Calle 28, Esq. 5ta
Miramar Playa
La Habana, Cuba

by fax: 537-2027030

Dear Dr. Alvarez,

We are writing to you to provide comments on your draft proposal to transfer Cuban populations of the hawksbill sea turtle (*Eretmochelys imbricata*) from Appendix I to Appendix II for the purpose of allowing a one-time export of hawksbill shells stockpiled by Cuba between 1993 and 2002.

General comments

The hawksbill sea turtle has experienced a global decline of at least 80% in the last three generations (105 years), and globally, only five sites remain with more than a 1,000 females nesting annually (Meylan and Donnelly, 1999). The species has therefore been categorized by the IUCN as "critically endangered." This designation was challenged in 2000 and upheld by decision of the Standards and Petitions Subcommittee (S&PS) of the IUCN-SSC Red List Committee in 2001.

The species' dramatic decline is attributed primarily to over-exploitation for its shell. Hawksbill sea turtles are very slow to mature, making their populations vulnerable to over-exploitation and slow to recover. Although there is no doubt that listing of *E. imbricata* in Appendix I of CITES has reduced illegal trade, unfortunately it continues at high levels in many parts of the Caribbean (TRAFFIC North America. April 2001. *Swimming Against the Tide: Recent Surveys of Exploitation, Trade and Manangement of Marine Turtles in the Northern Caribbean*). Given the species' migratory behavior, diminished population status, continuing illegal trade, and the absence of a regional management plan for the hawksbill sea turtle in the Caribbean, at this time, we believe that adoption of your proposal would be premature.

1. Migratory behavior of hawksbill sea turtles

The hawksbill sea turtle is a highly migratory species whose biological status can not be viewed and assessed based on conditions and information within the boundaries of a single nation. Moreover, Caribbean hawksbill sea turtles can not be managed as distinct national populations. As a range country for the species, we are very concerned that any reopening of the hawksbill shell trade will undermine conservation efforts for this species not only in the Caribbean, but also around the world.

Flipper tagging, satellite tracking, and genetic evidence clearly demonstrate that foraging populations in any one Caribbean country are derived from multiple nesting populations outside of its own territorial boundaries. Results of recent tagging and satellite studies conducted in 11 Caribbean geopolitical territories (including Cuba) have shown that *E. imbricata* has a complex variety of possible migratory and dispersion movements, showing interchanges between many countries in the region (HT2 Doc. 3.1, prepared by IUCN and presented at the Second CITES Wider Caribbean Hawksbill Turtle Dialogue meeting held in Grand Cayman on May 21-23, 2002). Hawksbill turtles tagged in Cuba with either flipper tags or satellite transmitters have visited the territorial waters of no fewer than 11 Caribbean countries and territories (i.e., Anguilla, Belize, Cayman Islands, Colombia, Guadeloupe, Honduras, Jamaica, Mexico, Nicaragua, and an area near Antigua/Guadeloupe/Montserrat), and the high seas, traveling distances as much as 2,450 km. Post-nesting

females tagged at Mona Island, Puerto Rico, traveled between 490 and 1,670 km, arriving at destinations as far as Honduras and Nicaragua, whereas hawksbill sea turtles in the U.S. Virgin Islands have traveled to or through the waters of the British Virgin Islands, Cuba, Dominican Republic, Netherlands Antilles, Nicaragua, Puerto Rico, and St. Lucia.

The migratory nature of the species is further documented by DNA analysis of samples collected from hawksbill turtles inhabiting foraging grounds in Cuba that revealed that 30-58% of these individuals did not originate on Cuban nesting beaches. According to Diaz-Fernandez et al. (1999), an estimated 12-31% of the sampled foraging population in Cuba originates from Mona Island, Puerto Rico. Likewise, Cuban nesting haplotypes were well represented (29%) in the Mona Island foraging samples.

The hawksbill sea turtle is listed as "endangered" under the U.S. Endangered Species Act. An important goal of the Recovery Plan for the hawksbill sea turtle is to reduce national and international trade. Additionally, the United States has ratified the Inter-American Convention for the Protection and Conservation of Sea Turtles (which entered into force on 2 May 2001). Harvest of *E. imbricata* originating from Puerto Rico and the U.S. Virgin islands while visiting Cuban territorial waters is a particular concern to us, since our recovery efforts for the nesting populations in these two U.S. Caribbean territories may be further undermined if the Cuban proposal were to be adopted.

2. Conservation status of the species

Hawksbill sea turtles are categorized by IUCN as "critically endangered" on a global scale. Of seven regularly monitored hawksbill nesting sites in the Caribbean (Yucatan Peninsula, Mexico; Buck Island Reef National Monument, St. Croix, US Virgin Islands; Jumby Bay, Antigua; Mona Island, Puerto Rico; Doce Leguas Cays, Cuba; Tortuguero, Costa Rica; and Barbados), four show an increasing trend in the number of nests in recent years (Yucatan, Mona, Doce Leguas Cays, and Barbados), with the largest increase (mean change per year of 35.1%) having occurred in Barbados (HT2 Doc. 3.2, prepared by IUCN and presented at the Second CITES Wider Caribbean Hawksbill Turtle Dialogue meeting held in Grand Cayman on May 21-23, 2002). However, in its recent review of the status of hawksbill sea turtles in the Caribbean, the IUCN also noted that, with the exception of Barbados, the nesting populations showing increasing trends have a history of strict protection efforts or they are geographically remote.

If one looks only at the hawksbill turtles nesting within Cuba, it is not possible to conclude that the "Cuban population" is increasing since nesting surveys within Cuba are far from comprehensive (Moncada et al. 1999). A maximum total of only 72 nests has been documented in any one year on the 9 index beaches that Cuba uses for their trend evaluation. Nesting on these index beaches is reported to represent only 3% of the total nesting within the country, and thus the claim that Cuba's hawksbill nesting population is increasing by > 20% per year is based on a small sample size. Furthermore, systematic surveys to detect trends only began in Cuba in 1997. This is clearly an insufficient time period to draw conclusions about current nesting trends in that country. Research suggests that it would be necessary to collect baseline data for a minimum of 3 multiples of the average re-migration interval (ARI) or at least 5 years, whichever is longer. In the case of hawksbill sea turtles, this is 8 years based on a 2.7-years remigration interval (R. Kerr. 2001. "Monitoring Population Trends", in Proceedings: *Marine Turtle Conservation in the Wider Caribbean Region: A Dialogue for Effective Regional Management*, Santo Domingo, Domincan Republic 16-17 November 1999). Moncada et al. (1999) concluded that the full extent of hawksbill nesting in Cuba is unknown.

3. Control measures

Based on CITES annual report data and other information, the illegal trade of hawksbill turtle products as well as other sea turtle species is the highest volume, most widespread, most long-term, and persistent illegal trade of any CITES Appendix-I species in the Convention's 25-year history. We commend Cuba for its regulatory mechanisms for tracking hawksbill shells accumulated through its national harvest program. Unfortunately, similar enforcement controls are not in place in any other hawksbill sea turtle range states in the Wider Caribbean so as to prevent illegal trade in hawksbill turtle (or other sea turtle) specimens. We fear

that the resumption of international trade in tortoise shells would have a catastrophic effect on this species and prevent the recovery of many small or depleted nesting populations.

Specific comments

The draft proposal contains several statements that are unsubstantiated, or in some cases run contrary to the IUCN's most recent reviews of the biology and status of hawksbill sea turtles in the wider Caribbean presented at this month's Second CITES Wider Caribbean Range States Hawksbill Turtle Dialogue meeting (HT2 Doc. 3.1 and HT2 Doc. 3.2).

Paragraph 2.1 states that *"Cuba has already demonstrated to the Parties [COP10 (1997); COP11 (2000)], with detailed supporting statements, that the E. imbricata population"* complies with Resolution Conf. 9.24. This statement is inaccurate since the proposals submitted by Cuba at COP10 and COP11 were not adopted. CITES requires a two-thirds majority for approval, not a simple majority, as suggested in paragraph 2.1. Without a full proposal similar to the ones submitted by Cuba at COP 10 and COP11, Parties will have great difficulty evaluating Cuba's COP12 abridged hawksbill sea turtle downlisting proposal.

Paragraph 3.1.3 states that *"... to date there have been no reports that any of the 28 adult nesting females to which satellite-trackable transmitters have been fixed in different parts of the Caribbean has ventured as far as Cuban waters."* Although this statement about satellite tracking studies is correct, flipper tagging and genetic studies have shown that hawksbill sea turtles originating from outside Cuba (including the United States) do visit Cuban territorial waters (HT2 Doc.3.1). See Migratory behavior of hawksbill sea turtles above for detailed comments.

Paragraph 3.3.1 states that *"... there is no risk of extinction in the foreseeable future."* Although this statement holds true when referring to the status of hawksbill sea turtles worldwide, it does not recognize the importance of the genetic diversity provided by many small or depleted nesting colonies nor the threat to these highly vulnerable local populations from reopening international. It is not only important to preserve the species by maintaining a few large populations, but it is equally important to maintain the biological diversity throughout the region, which the many small nesting colonies provide. It is also important to ensure that the species recovers to a level of abundance that allows it to provide its historic ecological function within the coral reef ecosystem.

Paragraph 3.7 - The observation that the wild population in Cuba is expanding despite the harvest may be attributable to the positive effects of greatly diminished international trade in the region during the last 10 years, and to the very significant conservation efforts on behalf of hawksbill sea turtles by other Caribbean countries whose *E. imbricata* stocks spend some portion of their lives in Cuban waters.

Paragraph 4.3 states that most illegal trade in hawksbill sea turtles *"occurs mainly outside of the Caribbean."* What is the basis for this statement?

Paragraph 4.4.1 states that adoption of the proposal *"will not stimulate harvesting within and outside Cuban waters."* However, Cuban scientists have concluded in peer-reviewed publications (Carrillo et al. 1999) that the extent to which the Cuban harvest has impacted populations outside Cuba is largely unknown.

Questions regarding the proposal

- How do body sizes of hawksbill sea turtles measured in Cuban waters in 2000 compare to those measured in the 1980s?

- Although there is no naming of a potential importing country, Cuba states that the export of scales will be conducted in a "single shipment." Why? What country will be the recipient?

- Since Cuba intends to continue harvesting hawksbill sea turtles on an annual basis, we can anticipate the continued accumulation of hawksbill shells. Does Cuba intend to request another one-time sale of these tortoise shells after COP12?

In conclusion, we believe that the hawksbill sea turtle does not qualify for transfer to Appendix II under CITES Resolution Conf. 9.24. It satisfies the following biological criteria of Conf. 9.24, Annex 1(Biological Criteria for Appendix I) for retention in Appendix I:

C. A decline in the number of individuals in the wild, which has been…observed as ongoing or as having occurred in the past (but with a potential to resume)

D. The status of the species is such that if the species is not included in Appendix I, it is likely to satisfy one or more of the above criteria within a period of five years.

Furthermore, the species does not satisfy the precautionary measures in Annex 4 paragraph B.2.b. of Conf. 9.24:

Species included in Appendix I should only be considered for transfer to Appendix II if they do not satisfy the relevant criteria in Annex 1. Even if such species do not satisfy the relevant criteria in Annex 1, they should be retained in Appendix I unless … the species is likely to be in demand for trade, but its management is such that the Conference of the Parties is satisfied with:

i) implementation by the range States of the requirements of the Convention, in particular Article IV; and

ii) appropriate enforcement controls and compliance with the requirements of the Convention;

Thank you for providing us with the opportunity to comment on the proposal.

Sincerely,

Robert Gabel
Chief, Division of Scientific Authority

Peter Thomas, Ph.D.
Chief, Division of Management Authority

3. Venezuela

From: PROFAUNA
Date: viernes, 31 de mayo de 2002 17:01:16
To: Dra. Silvia Alvarez
Subject: Propuesta cubana a la COP 12 de CITES

Para: Dra. Silvia Alvarez (silvia@cnsn.cu)

De: Edis Solórzano (profauna@marn.gov.ve), (edisol@cantv.net) (begomora@cantv.net)

Asunto: Propuesta cubana a la COP 12 de CITES

> Anexo al presente mensaje, se envían las observaciones elaboradas por la Dirección General de Fauna y oficina Nacional de Diversidad Biológica, al documento de propuesta "Transferencia, con nota aclaratoria, del segmento de la población de Tortuga Carey (***Eretmochelys imbricata***) presente en aguas cubanas, del Apéndice I al Apéndice II."
>
> Atentamente, Mirna Quero de Peña.

República Bolivariana de Venezuela
Ministerio del Ambiente y de los Recursos Naturales

DIRECCIÓN GENERAL DE FAUNA

Caracas

30.05.02

Por medio de la presente, me dirijo a usted en la oportunidad de notificarle que esta Dirección General, en atención a su solicitud ha analizado el borrador de la Propuesta "Transferencia, con nota aclaratoria, del segmento de la población de Tortuga Carey (***Eretmochelys imbricata***) presente en aguas cubanas, del Apéndice I al Apéndice II.

Ante todo, ruego me disculpe por el atraso en el envío de las observaciones al mencionado documento. Así mismo, aprovecho la oportunidad de reiterar el reconocimiento de la Dirección General de Fauna y la Oficina Nacional de Diversidad Biológica al gran esfuerzo realizado por Cuba en lo referente a la investigación, divulgación, formulación y puesta en práctica del Plan de Manejo de la Tortuga Carey en ese país, cuyos resultados han permitido conocer aspectos de gran relevancia en la biología, ecología y conservación de la misma a nivel mundial.

Como resultado del análisis del documento de propuesta, presentado ante la CITES para ser discutido en la Próxima Conferencia de las Partes (COP 12-CITES), el equipo técnico de esta Dirección General ha formulado algunas observaciones, las cuales se detallan a continuación:

? Al inicio de la propuesta, se indica que la transferencia del Apéndice I al II, se refiere al segmento de la población de tortuga carey presente en aguas cubanas y además que las poblaciones de tortuga carey no están fragmentadas, no obstante, en el punto 3.1.3 se reconoce que los índices de inmigración y emigración son poco conocidos. Este punto, constituye un argumento que puede ser utilizado por otros países para objetar la propuesta, dada la probabilidad de que los ejemplares capturados puedan "pertenecer" a otras poblaciones, amén del hecho de haberse reconocido en otros talleres la migratoriedad de estas poblaciones.

- Otro aspecto que merece ser destacado se refiere a que en la sección 3.3.3.7, se indica que las densidades observadas al sur de la República de Cuba y en la Isla de la Juventud son relativamente altas y sin embargo se acota que no han sido sometidas a monitoreos por largo tiempo que les permita aseverarlo y demostrarlo.

En este sentido, se recomienda que estos aspectos sean desarrollados de forma más contundente a fin de que no puedan ser utilizados en contra de la propuesta de la transferencia del Apéndice I al II durante la próxima COP 12-CITES, ya que le dan debilidad técnica a la propuesta en cuestión.

Finalmente y de acuerdo a los lineamientos políticos de nuestro país, dicha propuesta será remitida a las instancias políticas correspondientes a los fines de fijar la posición del país durante la celebración de la próxima COP-CITES. En este sentido consideramos que la misma continúa teniendo las mismas fortalezas del pasado y que las posiciones técnicas continuarán siendo las esgrimidas en otras ocasiones.

En espera de que este análisis sea de utilidad, le saluda atentamente,

Mirna Quero de Peña
Directora General de Fauna

"**XXV Aniversario del MARN... hacia la Cumbre Mundial sobre el Desarrollo Sostenible"**

Johannesburgo, Sudáfrica, septiembre, 2002.

Dirección General de Fauna. MARN. Centro Simón Bolívar, Torre Sur, piso 6
Telf: 58212.4082102 Fax: 0212.4082109

4. Barbados(4/6/02)

COMMENTS ON THE PROPOSAL TO TRANSFER THE POPULATION OF HAWKSBILL TURTLES IN CUBAN WATERS FROM APPENDIX I TO APPENDIX II

General:

The objective of this proposal is to export, in a single shipment, hawksbill shell that has been stockpiled since the ban on international trade in shell came into effect in December 1992. In order to do this transaction, Cuba must down-list its stockpile of shell derived from approximately five hundred (500) hawksbills caught per year since 1992, from Appendix I to Appendix II. It is important to note that the animals from which the shells are derived were caught between 1992 and 2001, when the species was even more endangered that it is today.

An important issue is therefore to examine whether the hawksbill turtle qualifies for Appendix II listing. The IUCN (World Conservation Union) decision to categorize hawksbills as Critically Endangered was recently challenged by two independent scientists. The decision was evaluated by a team of international experts making up the Marine Turtle Specialist Group and upheld i.e the decision to categorize them as critically endangered stands, justifying their continued inclusion in appendix I of CITES.

The turtles that provided shells to the stockpile are part of a shared Caribbean population- a population that some countries in the region have been protecting through bans on harvest whilst other countries have continued to exploit. Genetic results recently obtained from hawksbills foraging on the bank reef off the west coast of Barbados where they are fully protected, show that the hawksbills currently living in our waters include animals that were born in Mexican, Belizean, Cuban and Puerto Rican rookeries, and which will return to these countries at maturity in order to breed. The Barbados data suggest that hawksbills born in the western Caribbean may be swept out of the Caribbean and into the trans-Atlantic gyre. Following their re-entry into the Caribbean via the South Equatorial current, a substantial portion then settles in Barbados habitats for vary lengths of time before moving on. This scenario is supported not only by the detection of western Caribbean haplotypes in our waters, but also by the appearance of haplotypes that have only previously been recorded from West Africa. If this proposal is approved, we will effectively have a situation where a species will have been classified as Appendix I when in the waters of Barbados (or any other Caribbean country), but have become Appendix II post mortem after the same turtle was caught in Cuban waters. Although Cuba states that it will continue to treat other hawksbills in their waters as Appendix I, the management approach will presumably be to continue to harvest and store the shell from up to 500 animals per year. Can we therefore expect another proposal to downlist a stockpile to be forthcoming when Cuba is ready to export again?

This is not satisfactory situation, especially since the Parties will base their decision on whether to allow downlisting for purposes of trade at COP 12; largely on the basis of the finding that some countries in the region are reporting hawksbill population increases.

These countries which include Barbados, are primarily those where hawksbill are protected from harvest. We will have a situation where Barbadian fisher-folk (and other fisherfolk from countries in the region that are not harvesting) are not allowed to catch hawksbills, with the consequence that these countries will report increases in numbers of turtles. The increases in numbers reported by a few countries that are attempting to conserve animals in their waters, will then be used in the justification to allow downlisting that will open up trade and have the potential to threaten those very conservation efforts.

Specific comments:

Section 3.3.2

One of the summary points from the First Hawksbill Dialogue Meeting in Mexico City in May 2001 was that there were *gaps in the information needed to monitor the population status of hawksbills in the Caribbean.*

The Hawksbill Monitoring Workshop held in Miami in February 2002 was specifically designed to address this deficiency by (1) suggesting sites where monitoring should be undertaken to present a more representative picture of the status of hawksbills in the region and (2) by developing standardised monitoring protocols to allow comparisons between sites.

Increasing the number of sites was deemed desirable because most of the current monitoring programmes are in countries where turtles are fully protected (e.g. Barbados, Mexico, Puerto Rico, US Virgin Islands) or countries where the fishery is highly regulated (Cuba). The trends of increasing relative abundance at these sites may not be indicative of the status of hawksbills in the region, because many parts of the Caribbean where there are active, but minimally regulated fisheries or where protective legislation is poorly enforced, are not being monitored. I do not agree that the nesting results from the sites being monitored necessarily reflect the status of all adults in the country where the females spend most of their lives. For instance, we know that hawksbills that nest in Barbados do not live in Barbados for the intervening 2-3 year periods (our data indicate that they disperse to at least five different Caribbean nations - Dominica, Guadeloupe, Grenada, Trinidad and Venezuela; Horrocks *et al* 2001; unpubl. data). Moreover, we know that in these countries they typically take up occupancy on windward coasts and/or in deep waters unsuitable for netting and spearfishing. The result is that Barbados nesting females, fully protected by law in Barbados whilst nesting, and protected by their inaccessibility to fishers whilst on their foraging grounds in other countries, may be increasing in number. However, this does not mean that other components of the adult population living in the same country where Barbados turtles are foraging are necessarily increasing. Indeed, the latter's numbers could well be declining if they are not protected in the country where they nest. There is no doubt that further monitoring is needed, *as was concluded at the First Hawksbill Dialogue*, before the status in the Caribbean region can be properly assessed.

Note that the mean average annual increase in nests for Barbados has been revised to 35.1% (not 42.3% as stated in Meylan 2001).

Section 3.3.3.4

It would be informative to see how the present increasing mean size of animals caught relates to the sizes caught in the early period of heavy harvesting. This current upward trend in size caught is presumably a sign that a formerly heavily harvested population is now in the early stages of recovery, but sizes may still be much smaller that in a 'pre-harvested' population. The mean size of hawksbills currently nesting in Cuba is certainly substantially smaller than the mean size of those currently nesting in Barbados.

Section 4.4.1

Since trade was the uncontested reason for the severely depleted status of hawksbills, I think that Barbados should continue to have concerns about the resumption of trade in any form after only ten years of protection. I do not think it is possible to state that trade from Cuba will not stimulate harvesting outside of Cuban waters. It is very plausible that countries with legal harvests will increase their fishing pressure in anticipation of being able to sell shell at some later date also.