AGREEMENT ON THE INTERNATIONAL DOLPHIN CONSERVATION PROGRAM

13TH MEETING OF THE PARTIES

LANZAROTE (SPAIN)
15 JUNE 2005

DOCUMENT MOP-13-05a

REPORT ON THE INTERNATIONAL DOLPHIN CONSERVATION PROGRAM

1. INTRODUCTION

In the eastern Pacific Ocean (EPO), schools of yellowfin tuna frequently associate with marine mammals, especially spotted, spinner, and common dolphins. When the purse-seine fishery for tunas in the EPO began around 1960, the fishermen found that their catches of yellowfin in the EPO could be maximized by setting these nets around the herd of dolphins and the associated school of tunas. However, releasing the dolphins caught without losing the tuna proved more difficult, and in the early years of the fishery many dolphins became entangled in the nets and died during this process. As techniques and equipment to solve this problem were developed, this mortality fell, gradually at first and dramatically in the 1990s, thanks to the combined efforts of the fishing industry, governments, the IATTC, environmental organizations, and other interested parties.

The 1992 La Jolla Agreement provided a framework for the international efforts to reduce this mortality, and introduced such novel and effective measures as Dolphin Mortality Limits (DMLs) for individual vessels, an observer program for vessels fishing tunas associated with dolphins, and the International Review Panel to monitor the performance and compliance of the fishing fleet. The Agreement on the International Dolphin Conservation Program (AIDCP), which built on and formalized the provisions of the La Jolla Agreement, was signed in May 1998 and entered into force in February 1999. The Parties to this agreement committed to "ensure the sustainability of tuna stocks in the eastern Pacific Ocean and to progressively reduce the incidental dolphin mortalities in the tuna fishery of the eastern Pacific Ocean to levels approaching zero; to avoid, reduce and minimize the incidental catch and the discard of juvenile tuna and the incidental catch of non-target species, taking into consideration the interrelationship among species in the ecosystem."

As of December 31, 2004, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Peru, United States, Vanuatu, and Venezuela have ratified or acceded to the Agreement, and Bolivia, Colombia, and the European Union are applying the AIDCP provisionally. The IATTC provides the Secretariat for the IDCP and its various bodies and coordinates the On-Board Observer Program and the Tuna Tracking and Verification System.

2. THE ON-BOARD OBSERVER PROGRAM

The IATTC's international observer program and the national observer programs of Ecuador (Programa Nacional de Observadores Pesqueros de Ecuador; PROBECUADOR), the European Union (Programa

Nacional de Observadores de Túnidos, Océano Pacífico; PNOT), Mexico (Programa Nacional de Aprovechamiento del Atún y Protección de Delfines; PNAAPD), and Venezuela (Programa Nacional de Observadores de Venezuela; PNOV) constitute the AIDCP On-Board Observer Program. In addition, observers from the international observer program of the Forum Fisheries Agency (FFA) are approved by the Parties to collect information for the On-Board Observer Program on vessels that fish in the Agreement Area without setting on dolphins if the Secretariat determines that the placement of an IDCP observer is not practical.

2.1. Observer coverage

The AIDCP mandates 100% coverage by observers of fishing trips by purse seiners of carrying capacity greater than 363 metric tons (t) (IATTC Class 6) in the Agreement Area. In 2004 the Ecuadorean program had a goal of sampling approximately one-third of the trips by its fleet, and the European Union, Mexican, and Venezuelan programs each had a goal of sampling approximately half of the trips by their respective fleets. The IATTC program covered the remainder of the trips by these four fleets, plus all trips by vessels of other fleets, except as noted below.

During 2004, observers from the On-Board Observer Program departed on 760 fishing trips (Table 1). In addition, 74 vessels whose last trip of 2003 carried over into 2004 had observers aboard, bringing the total to 834 trips observed in 2004 by the Program. The Program covered vessels operating under the jurisdictions of Bolivia, Colombia, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Spain, the United States, Vanuatu, and Venezuela.

In 2004 the Program sampled 100% of trips by vessels covered by the AIDCP, and the IATTC program sampled 70% of all trips.

2.2. Observer training

In November 2004 a training course for IATTC observers was held in Manta, Ecuador. It was attended by 17 trainees, 11 from Ecuador and 6 from Panama. One of the Ecuadorian trainees was from the Ecuadorian national observer program.

3. DOLPHIN MORTALITY

3.1. Dolphin Mortality Limits (DMLs)

3.1.1. 2004 DMLs

The overall dolphin mortality limit (DML) for the international fleet in 2004 was 5,000 animals, and the unreserved portion of 4,900 was allocated to 91 vessels that requested and were qualified to receive DMLs. The average individual-vessel DML (ADML), based on 90 DML requests, was 54.444. Of the 13 vessels that did not utilize their DMLs prior to April 1, five forfeited their DMLs, and the other eight were allowed to keep them for the remainder of the year under the *force majeure* exemption allowed by the AIDCP. A total of 82 vessels utilized their full-year DMLs. In addition, three vessels were allocated DMLs from the Reserve DML Allocation (RDA), two vessels receiving DMLs of 20 and one vessel receiving a DML of 15. Two of those DMLs were utilized. Three vessels were allocated second-semester DMLs of 18, two of which were utilized.

At the end of the first quarter of 2004, the Secretariat sent letters to three vessels advising them that they risked exceeding their assigned DML if their mortality levels continued to accumulate at their first-quarter rate. Similar letters were sent to three vessels at the end of the second quarter of 2004, one of which also received a first-quarter letter. One vessel exceeded its DML in 2004. The distribution of the mortality caused in 2004 by vessels with DMLs is shown in Figure 1.

3.1.2. 2005 DMLs

Ninety-eight eligible vessels requested and received DMLs for 2005 from the unreserved portion (4,900) of the overall fleet mortality limit. The DMLs of four of those vessels had been held in reserve pending

resolution of a dispute between two Parties over the flag of the vessels. The ADML is 50. Three vessels forfeited their DMLs by not utilizing them prior to April 1. Three vessels have requested and received DMLs from the RDA of 20, and 3 vessels, including a vessel that has received a DML from the RDA, have requested, and will receive, second-semester DMLs of 16.

3.2. Preliminary estimates of the mortality of dolphins in 2004 due to fishing

The preliminary estimate of the incidental mortality of dolphins in the fishery in 2004 is 1,469 animals (Table 2), a 2.2% decrease over the 1,502 mortalities recorded in 2003. The mortalities for 1979-2004, by species and stock, are shown in Table 3, and the standard errors of these estimates are shown in Table 4. The mortalities of the principal dolphin species affected by the fishery show declines in the last decade (Figure 2) similar to that for the mortalities of all dolphins combined (Figure 3). Estimates of the abundances of the various stocks of dolphins for 1986-1990 and the relative mortalities (mortality/abundance) are also shown in Table 2. The stocks with the highest levels of relative mortality (0.03%) were northeastern spotted dolphins, eastern spinner dolphins, and northern common dolphins.

The number of sets on dolphin-associated schools of tuna made by Class-6 vessels fell by 15%, from 13,839 in 2003 to 11,783 in 2004, and this type of set accounted for 52% of the total number of sets made in 2004, compared to 57.% in 2003. The average mortality per set increased from 0.11 dolphins in 2003 to 0.12 dolphins in 2004. The estimated spatial distribution of the average mortalities per set during 2004 is shown in Figure 4. Typically, patches of relatively high mortalities per set were found throughout the fishing area, but in 2004 the higher-mortality areas were west of the Galapagos Islands, off the tip of Baja California, and at the far western edge of the fishery along the 10ºN parallel. The trends in the numbers of sets on dolphin-associated fish, mortality per set, and total mortality in recent years are shown in Figure 3.

The catches of dolphin-associated yellowfin decreased by 35% in 2004 as compared to 2003. The percentage of the catch of yellowfin taken in sets on dolphins decreased from 76% of the total catch in 2003 to 69% of the catch in 2004, and the average catch of yellowfin per set on dolphins decreased from 20 to 15 metric tons. The mortality of dolphins per metric ton of yellowfin caught increased from 0.0053 in 2003 to 0.0080 in 2004.

The above figures are based on data from trips covered by observers from all components of the On-Board Observer Program. The comparisons in the next paragraph are based on the IATTC data bases for 1986-2004 only.

The decrease in the mortality per set is the result of actions by the fishermen to better manage the factors that bring about incidental mortalities of dolphins. Indicative of this effort is the number of sets in which no mortalities occurred, which has risen from 38% in 1986 to 94% in 2004, and the average number of animals left in the net after backdown, which has decreased from 6.0 in 1986 to less than 0.1 in 2004 (Table 5). The factors under the control of the fishermen which are likely to affect the mortality of dolphins per set include the occurrence of malfunctions, especially those which lead to net canopies and net collapses, and the time it takes to complete the backdown maneuver (Table 5). The percentage of sets with major mechanical malfunctions has decreased from an average of approximately 11% during the late 1980s to less than 6% during 1998-2004; in the same period the percentage of sets with net collapses decreased from about 30% to less than 5% on average, and that of net canopies from about 20% to less than 5% on average. Although the chance of dolphin mortality increases with the duration of the backdown maneuver, the average backdown time has changed little since 1986. Also, the mortality of dolphins per set increases with the number of animals in the encircled herd, in part because the backdown maneuver takes longer to complete when larger herds are encircled. The fishermen can reduce the mortalities per set by encircling schools of fish associated with fewer dolphins.

3.3. Reports of dolphin mortality by observers at sea

The AIDCP requires the Parties to establish a system, based on real-time observer reporting, to ensure

effective implementation and compliance with per-stock, per-year dolphin mortality caps. Observers prepare weekly reports of dolphin mortality, by stock, which are then transmitted to the Secretariat via e-mail, fax, or radio. In June 2003 the Meeting of the Parties adopted Resolution A-03-02 on at-sea reporting, which makes the vessel personnel responsible for transmitting these reports. During 2004, the reporting rate averaged 73% (Table 6), and the reporting rate for 2005, as of May 8, has averaged 75%.

Since January 1, 2001, the Secretariat has been reporting weekly to the Parties the cumulative mortality for the seven stocks of dolphins most frequently associated with the fishery. The most recent reported mortalities for 2005 are shown in Table 7.

4. INTERNATIONAL REVIEW PANEL

The International Review Panel (IRP) follows a general procedure for reporting the compliance by vessels with measures established by the AIDCP for minimizing the mortalities of dolphins during fishing operations to the governments concerned. After each fishing trip the observer prepares a summary of information pertinent to dolphin mortalities, and this is sent to the government with jurisdiction over the vessel by the Secretariat. Certain possible infractions are automatically reported to the government with jurisdiction over the vessel in question; the IRP reviews the observer data for other cases at its meetings, and any cases identified as possible infractions are likewise reported to the relevant government. The governments report back to the IRP on actions taken regarding these possible infractions.

During 2004, the IRP consisted of 21 members: the 15 participating governments that have accepted the Agreement, and six representatives of non-governmental organizations (NGOs), three from environmental organizations and three from the tuna industry.

The IRP held the following meetings during 2004:

Meeting	Venue	Dates
35	La Jolla, California	February 19
36	Lima, Peru	June 8
37	La Jolla, California	October 19

The minutes of these meetings are available on the IATTC's website. Tables 8-9 and Appendix A of this report summarize possible infractions identified by the Panel at these meetings and subsequent action taken by the governments.

5. TUNA TRACKING AND VERIFICATION

The System for Tracking and Verifying Tuna, established in accordance with Article V.1.f of the AIDCP, enables "dolphin-safe" tuna, defined as tuna caught in sets without mortality or serious injury of dolphins, to be identified and tracked from the time it is caught through unloading, processing, and sale. The Tuna Tracking Form (TTF), completed at sea by observers, identifies the tuna caught as dolphin safe (Form 'A') or non-dolphin safe (Form 'B'); with this document, the dolphin safe status of any tuna caught by a vessel covered by the AIDCP can be determined. Within this framework, administered by the Secretariat, each Party establishes its own tracking and verification program, implemented and operated by a designated national authority, which includes periodic audits and spot checks for caught, landed, and processed tuna products, mechanisms for communication and cooperation between and among national authorities, and timely access to relevant data. Each Party is required to provide the Secretariat with a report detailing its tracking and verification program.

All trips by vessels that departed in 2004 with an IDCP observer aboard were issued TTFs.

6. AMENDMENTS AND RESOLUTIONS AFFECTING THE OPERATION OF THE IDCP

The 11th Meeting of the Parties passed two resolutions that affect the operation of the IDCP. Resolution A-04-02 requires any fishing captain on an IDCP vessel who has committed two or more night set infractions to attend an instructional seminar, as described in Section 3.1 of the *Procedures for*

maintaining the AIDCP List of Qualified Captains, prior to his next trip as a fishing captain, unless no seminar is available before that trip, in which case he shall be required to attend a seminar as soon as possible thereafter. Resolution A-04-03 requires each Party to inspect its DML vessels twice a year to ensure that the dolphin safety gear and equipment requirements in Section 2 of Annex VIII of the AIDCP have been met.

The 11th Meeting of the Parties also amended the *Procedures for AIDCP Dolphin Safe Tuna Certification* by adding a new Section 3, *Procedures for invalid dolphin safe certificates.*

The 12th Meeting of the Parties passed Resolution A-04-07, which establishes a list of vessels presumed to have carried out illegal, unreported and unregulated (IUU) fishing activities in the Agreement Area. Once the Parties adopt the list , they shall ask non-parties with vessels on the list to take all the necessary measures to eliminate IUU fishing activities.

The 12th Meeting of the Parties also amended Annex VIII (I) of the AIDCP to require that vessels with a DML have onboard an operable long-range, high-intensity floodlight with a sodium lamp of at least 1,000 watts or a multivapor lamp of at least 1,500 watts.

7. OTHER FUNCTIONS PERFORMED BY THE SECRETARIAT

7.1. Dolphin safety panel alignments

During 2004, the IATTC staff conducted alignments of dolphin-safety panels (DSPs) and inspections of dolphin rescue gear aboard 18 vessels, 13 registered in Mexico, 2 registered in Panama and one each registered in Ecuador, Guatemala, and Nicaragua. A trial set, during which an IATTC technician observes the performance of the net from an inflatable raft during backdown, is made to check the alignment of the DSP. The technician transmits his observations, comments, and suggestions to the captain of the vessel, and attempts are made to resolve any problems that may arise. Afterward a report is prepared for the vessel owner or manager. This report contains a summary of the technician's observations and, if necessary, suggestions for improving the vessel's dolphin-safety gear and/or procedures.

7.2. Training and certification of fishing captains

The IATTC has conducted dolphin mortality reduction seminars for tuna fishermen since 1980. Article V of the AIDCP calls for the establishment, within the framework of the IATTC, of a system of technical training and certification of fishing captains. Under the system, the IATTC staff is responsible for maintaining a list of all captains qualified to fish for tunas associated with dolphins in the EPO. The names of the captains who meet the requirements are to be supplied to the IRP for approval and circulation to the Parties to the AIDCP.

The requirements for new captains are (1) attending a training seminar organized by the IATTC staff or by the pertinent national program in coordination with the IATTC staff, and (2) having practical experience relevant to making sets on tunas associated with dolphins, including a letter of reference from a captain currently on the List, the owner or manager of a vessel with a DML, or a pertinent industry association. These seminars are intended not only for captains, who are directly in charge of fishing operations, but also for other crew members and for administrative personnel responsible for vessel equipment and maintenance. The fishermen and others who attend the seminars are presented with certificates of attendance.

During 2004 the IATTC staff conducted one seminar in Panama City, Panama. The Mexican national program conducted five seminars, three in Mazatlan and two in Ensenada, Mexico. The Venezuelan national program conducted two seminars, one in Caracas, Venezuela, and one in Panama City, Panama. Also, the National Marine Fisheries Service of the United States conducted two seminars, both in Long Beach, California. A total of 189 fishermen attended the ten seminars.

7.3. Statements of Participation

Statements of Participation are issued by the Secretariat on request to vessels that carry observers from the On-Board Observer Program. There are two types: the first, issued to vessels of Parties to the AIDCP only, certifies that the vessel has been participating in the IDCP, and that all its trips have been covered by observers; the second, issued to vessels of non-Parties, certifies only that all the vessel's trips have been covered by observers. During 2004 statements of the first type were issued for 105 fishing trips by vessels of Ecuador, El Salvador, Guatemala, Honduras, Nicaragua, Panama, the United States, Vanuatu, and Venezuela. None were issued of the second type.

8. RESEARCH

8.1. Distribution of fishing effort

Figures 5-7 compare the spatial distributions of the fishing effort by vessels carrying observers, in numbers of sets, by type, in 2003 and 2004. The patterns were largely similar between the two years, although the sets on floating objects extended further offshore in 2004.

In collaboration with the Department of Statistics at the University of California, Los Angeles, the IATTC staff have been developing algorithmic statistical techniques to be used to screen for data quality. These techniques can be applied to past years' data as one of several tools used by the IATTC staff to ensure data quality.

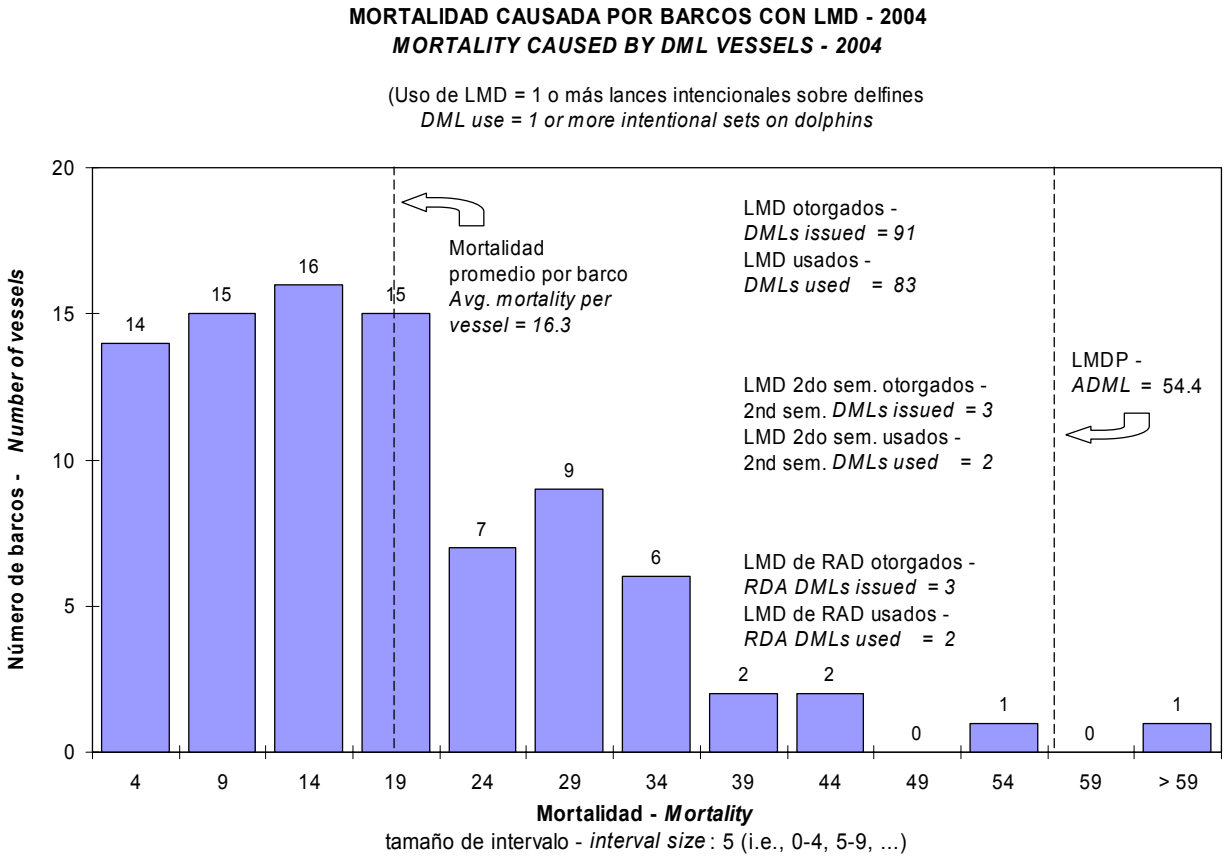

FIGURE 1. Distribution of dolphin mortality caused by vessels with DMLs during 2004.
FIGURA 1. Distribución de la mortalidad de delfines causada por buques con LMD durante 2004.

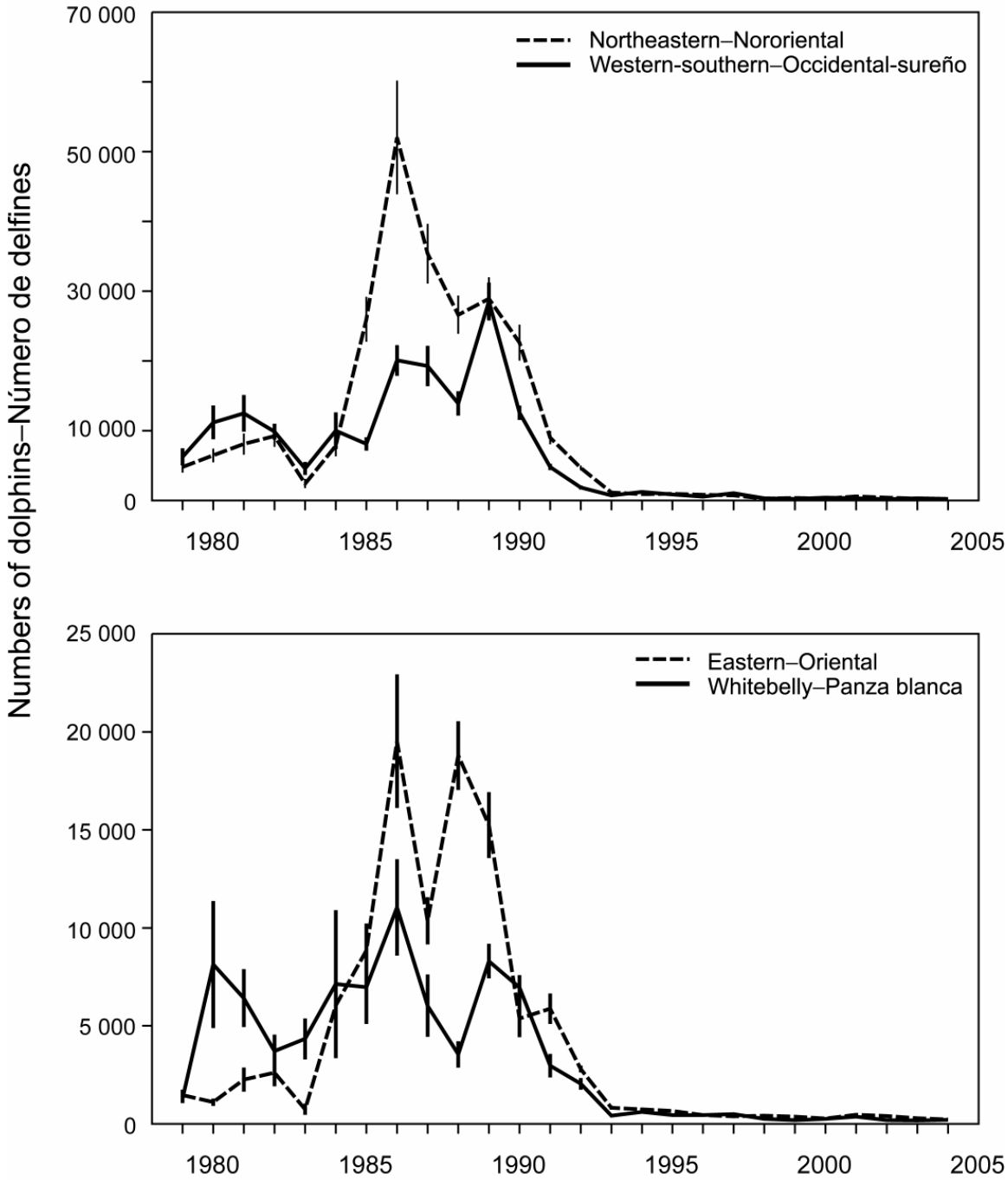

FIGURE 2. Estimated mortalities for the stocks of spotted (upper panel) and spinner (lower panel) dolphins in the eastern Pacific Ocean, 1979-2004. Each vertical line represents one positive and one negative standard error.

FIGURA 2. Mortalidad estimada de las poblaciones de delfines manchados (panel superior) y tornillo (panel inferior) en el Océano Pacífico oriental, 1979-2004. Cada línea vertical representa un error estándar positivo y un error estándar negativo.

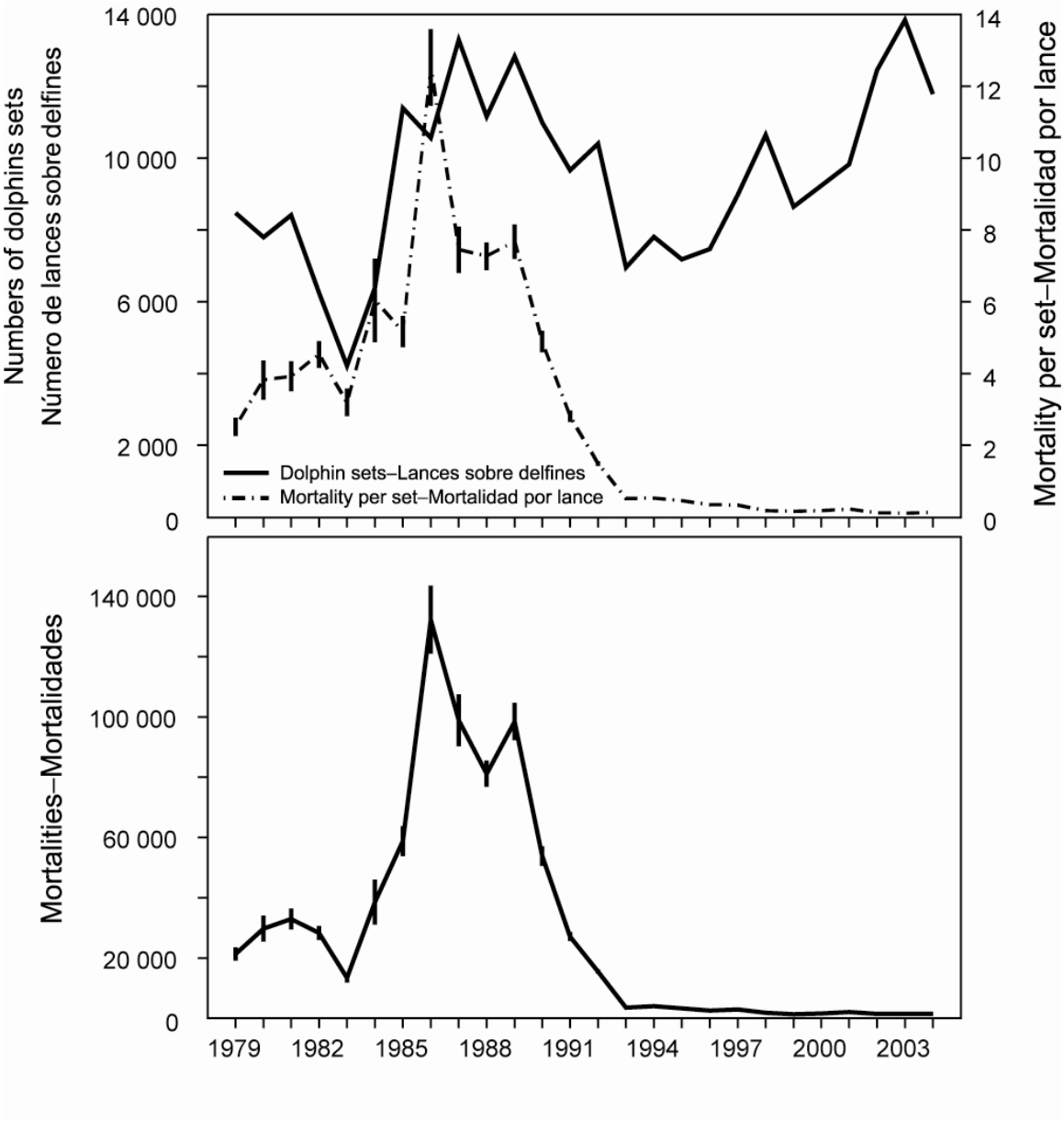

FIGURE 3. Total number of dolphin sets and average mortality per set (upper panel) and estimated total mortality (lower panel) for all dolphins in the EPO, 1979-2004. Each vertical line represents one positive and one negative standard error.

FIGURA 3.: Número total de lances sobre delfines y mortalidad media por lance (panel superior) y mortalidad total estimada (panel inferior) para todas especies de delfines en el OPO, 1979-2004. Cada línea vertical representa un error estándar positivo y un error estándar negativo.

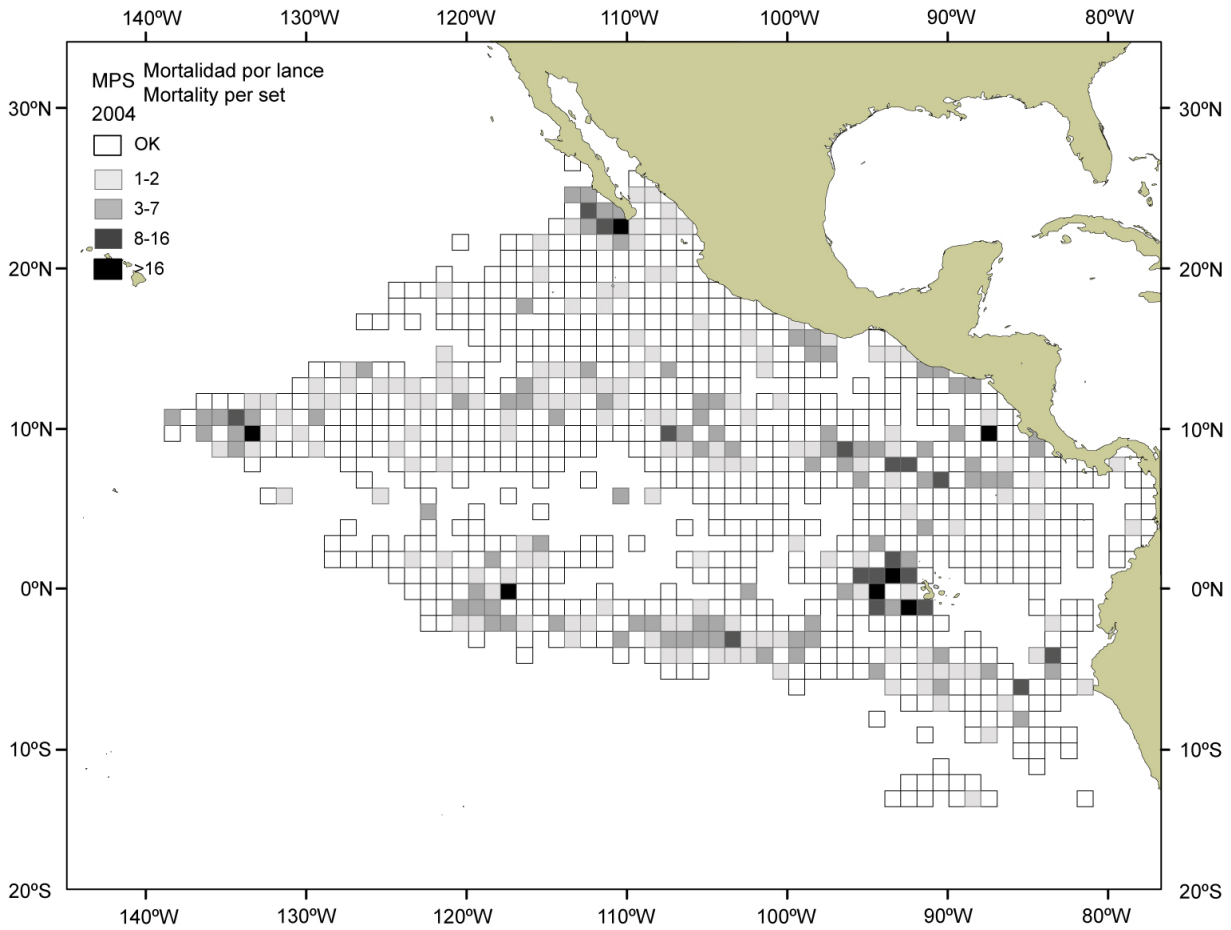

FIGURE 4. Spatial distribution of the average mortality of dolphins per set for all stocks combined, 2004.

FIGURA 4. Distribución de la mortalidad media de delfines por lance para todas las poblaciones combinadas, 2004.

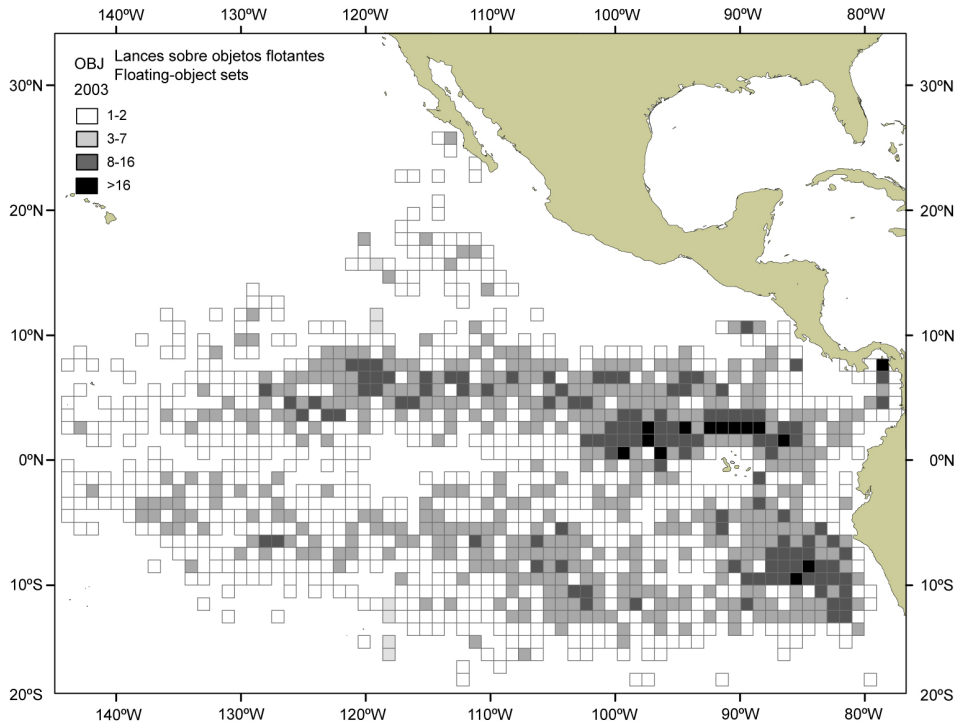

FIGURE 5a. Spatial distribution of sets on tuna associated with floating objects, 2003.
FIGURA 5a. Distribución espacial de lances sobre objetos flotantes, 2003.

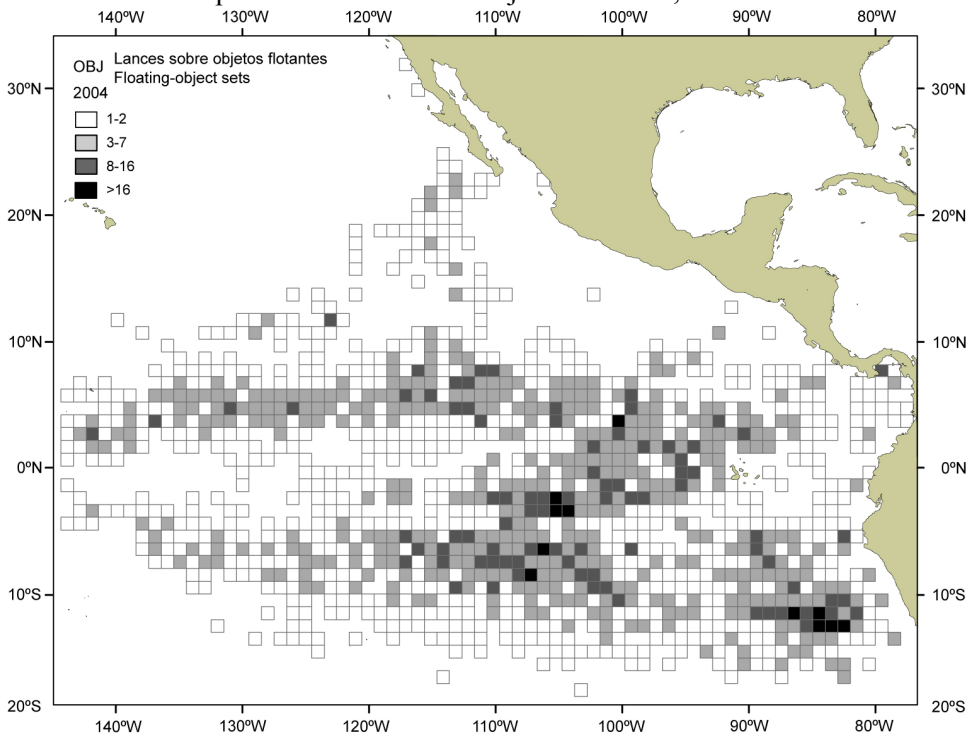

FIGURE 5b. Spatial distribution of sets on tuna associated with floating objects, 2004.
FIGURA 5b. Distribución espacial de lances sobre objetos flotantes, 2004.

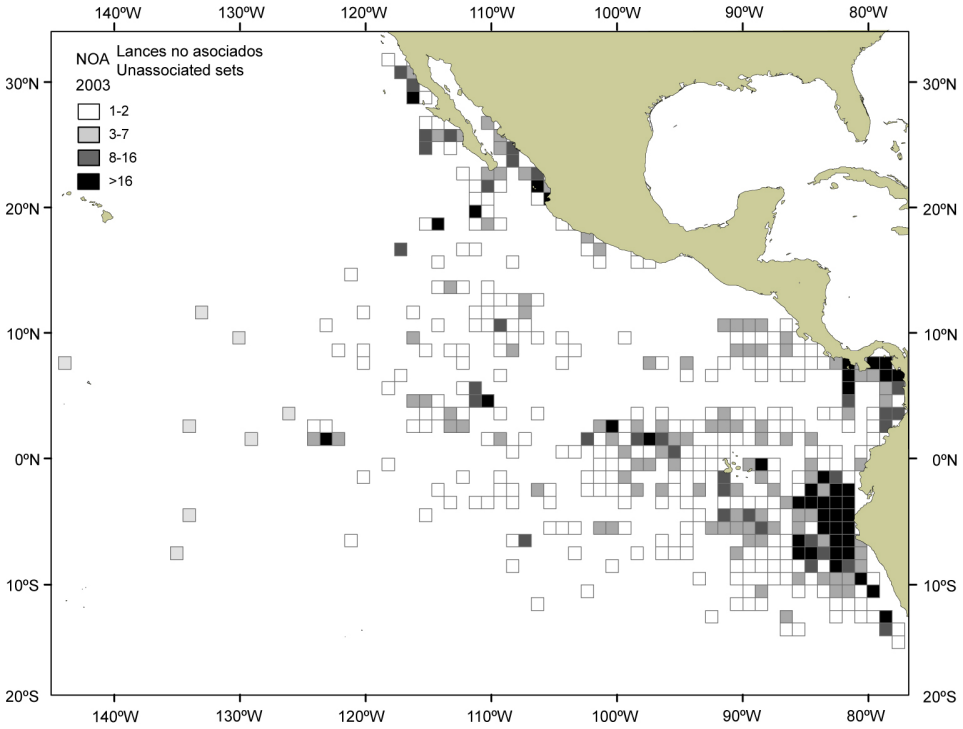

FIGURE 6a. Spatial distribution of sets on unassociated schools, 2003.
FIGURA 6a. Distribución espacial de lances sobre cardúmenes no asociados, 2003.

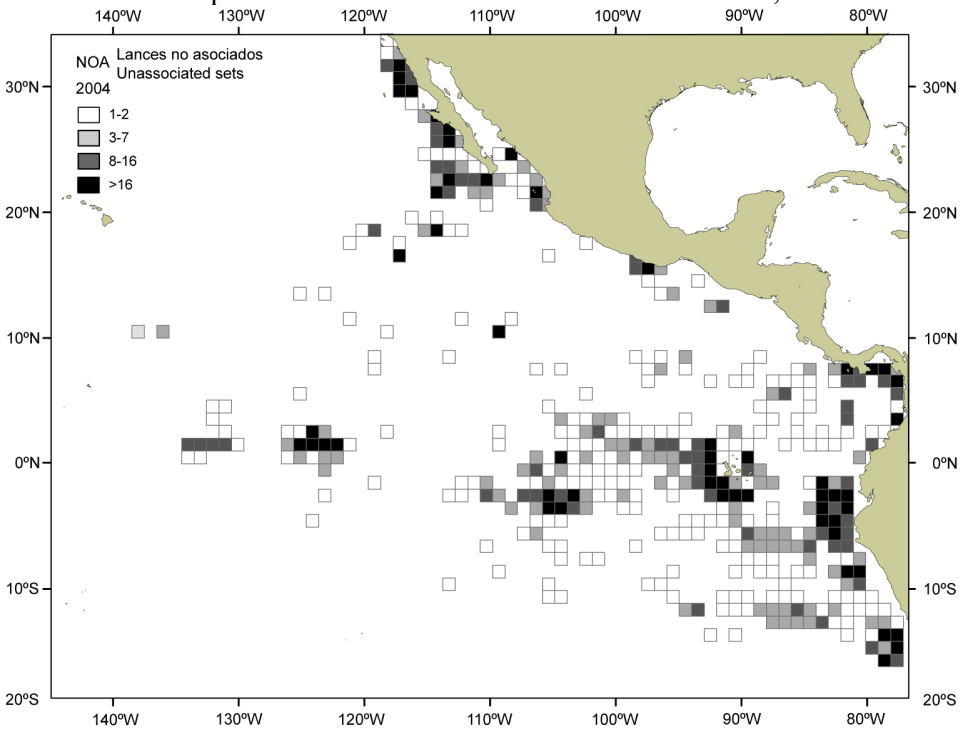

FIGURE 6b. Spatial distribution of sets on unassociated schools, 2004.
FIGURA 6b. Distribución espacial de lances sobre cardúmenes no asociados, 2004.

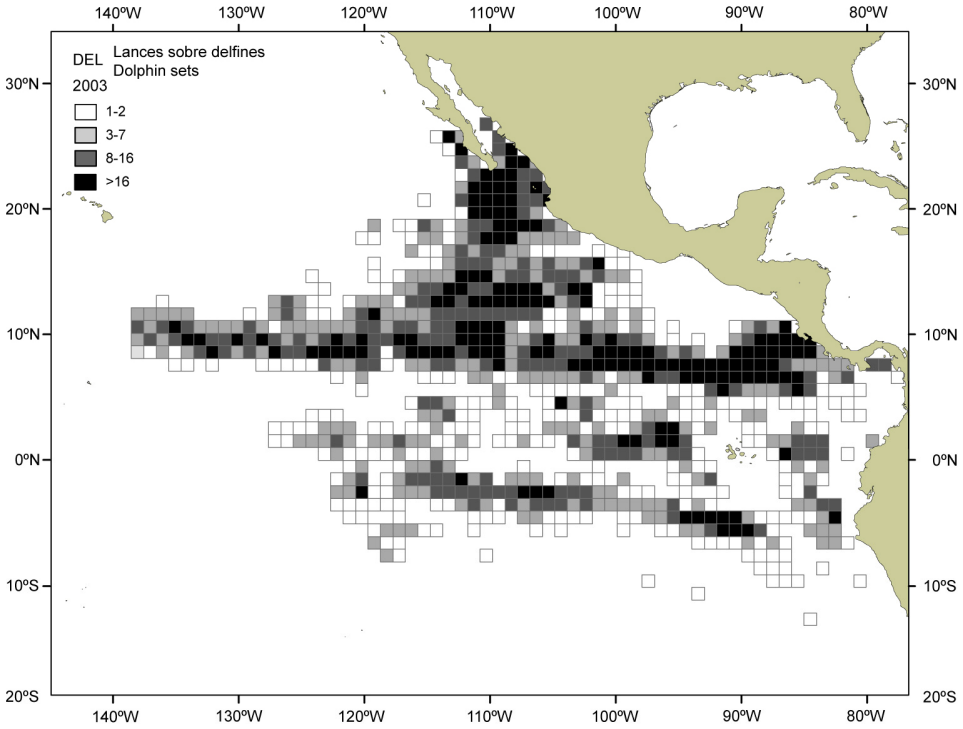

FIGURE 7a. Spatial distribution of sets on tuna associated with dolphins, 2003.
FIGURA 7a. Distribución espacial de lances sobre delfines, 2003.

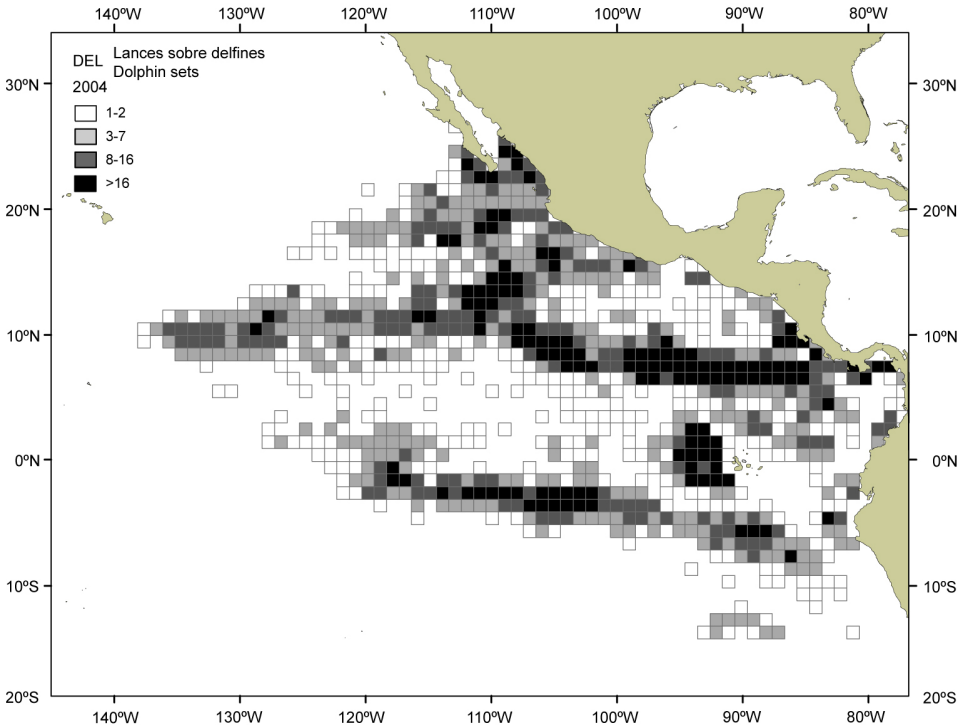

FIGURE 7b. Spatial distribution of sets on tuna associated with dolphins, 2004.
FIGURA 7b. Distribución espacial de lances sobre delfines, 2004.

TABLE 1. Sampling coverage by the On-Board Observer Program during 2004.
TABLA 1. Cobertura por el Programa de Observadores a Bordo durante 2004.

Flota nacional		**Viajes**	**Observado por programa:**			**% observado**
			CIAT	**Nacional**	**Total**	
National fleet		**Trips**	**Observed by program:**			**% observed**
			IATTC	**National**	**Total**	
Bolivia	BOL	28	28	-	28	100
Colombia	COL	31	31	-	31	100
Ecuador	ECU	255	169	86	255	100
España--Spain	ESP	22	13	9	22	100
Guatemala	GTM	3	3	-	3	100
Honduras	HON	17	17	-	17	100
México	MEX	218	114	104[1]	218	100
Nicaragua	NIC	8	8	-	8	100
Panamá	PAN	86	86	-	86	100
El Salvador	SLV	20	20	-	20	100
USA—EE.UU.	USA	17	15	2[2]	17	100
Venezuela	VEN	108	58	50	108	100
Vanuatu	VUT	21	21	-	21	100
Total		**834[3]**	**583**	**251**	**834[3]**	**100**

[1] One trip was also partially sampled by the IATTC program – Un viaje muestreado en parte por el programa de la CIAT

[2] FFA program observers approved pursuant to Annex II of the AIDCP - Observadores del programa FFA aprobados de conformidad con el Anexo II del APICD.

[3] Includes 74 trips that began in late 2003 and ended in 2004 - Incluye 74 viajes iniciados a fines de 2003 y terminados en 2004**.**

TABLE 2. Estimates of mortalities of dolphins in 2004, population abundance pooled for 1986-1990 (from Report of the International Whaling Commission, 43: 477-493), and relative mortality (with approximate 95% confidence intervals), by stock. Data for 2004 are preliminary.
TABLA 2. Estimaciones de la mortalidad incidental de delfines en 2004, la abundancia de poblaciones agrupadas para 1986-1990 (del Informe de la Comisión Ballenera Internacional, 43: 477-493), y la mortalidad relativa (con intervalos de confianza de 95% aproximados), por población. Los datos de 2004 son preliminares.

Species and stock Especie y población	Incidental mortality Mortalidad incidental	Population abundance Abundancia de la población	Relative mortality (%) Mortalidad relativa (%)
Offshore spotted dolphin—Delfín manchado de altamar			
Northeastern—Nororiental	250	730,900	0.03 (0.026, 0.043)
Western/southern—Occidental y sureño	248	1,298,400	0.02 (0.015, 0.027)
Spinner dolphin—Delfín tornillo			
Eastern—Oriental	220	631,800	0.03 (0.022, 0.053)
Whitebelly—Panza blanca	214	1,019,300	0.02 (0.013, 0.028)
Common dolphin—Delfín común			
Northern—Norteño	159	476,300	0.03 (0.019, 0.072)
Central	100	406,100	0.02 (0.013, 0.048)
Southern—Sureño	222	2,210,900	<0.01 (0.007, 0.016)
Other dolphins—Otros delfines[1]	56	2,802,300	<0.01 (0.001, 0.002)
Total	**1,469**	**9,576,000**	**0.015 (0.013, 0.017)**

[1] "Other dolphins" includes the following species and stocks, whose observed mortalities were as follows: striped dolphins (*Stenella coeruleoalba*), 5; coastal spotted dolphin (*Stenella attenuata*), 9; central American spinner dolphin (*Stenella longirostris centroamericana*) 7; rough-toothed dolphin (*Steno bredanensis*) 1; and unidentified dolphins, 34.
[1] "Otros delfines" incluye las siguientes especies y poblaciones, con las mortalidades observadas correspondientes: delfín listado (*Stenella coeruleoalba*), 5; delfin manchado costero (*Stenella attenuata*), 9; delfin tornillo centroamericano (*Stenella longirostris centroamericana*) 7; delfín de dientes rugosos (*Steno bredanensis*) 1; y delfines no identificados, 34.

TABLE 3. Annual estimates of dolphin mortality, by species and stock, 1979-2004. The data for 2004 are preliminary. The estimates for 1979-1992 are based on a mortality-per-set ratio. The estimates for 1993-1994 are based on the sums of the IATTC species and stock tallies and the total dolphin mortalities recorded by the Mexican program, prorated to species and stock. The mortalities for 1995-2004 represent the sums of the observed species and stock tallies recorded by the programs of the IATTC, Ecuador, Mexico, and Venezuela. Mortalities for 2001-2003 have been adjusted for unobserved trips of Class-6 vessels. The sums of the estimated mortalities for the northeastern and western-southern stocks of offshore spotted dolphins do not necessarily equal those for the previous stocks of northern and southern offshore spotted dolphins because the estimates for the two stock groups are based on different areal strata, and the mortalities per set and the total numbers of sets vary spatially.

TABLA 3. Estimaciones anuales de la mortalidad de delfines, por especie y población, 1979-2004. Los datos de 2004 son preliminares. Las estimaciones de 1979-1992 se basan en una razón de mortalidad por lance. Las estimaciones de 1993-1994 se basan en las sumas de las mortalidades por especie y población registradas por la CIAT y las mortalidades totales registradas por el programa mexicano, prorrateadas a especies y poblaciones. Las mortalidades de 1995-2004 son las sumas de las mortalidades por especie y población registradas por los programas de la CIAT, Ecuador, México, y Venezuela. La mortalidad de 2001-2003 fue ajustada para viajes no observados de buques de Clase 6. Las sumas de las mortalidades estimadas para las poblaciones nororiental y occidental y sureño del delfín manchado de altamar no equivalen necesariamente a las sumas de aquéllas para las antiguas poblaciones de delfín manchado de altamar norteño y sureño porque las estimaciones para los dos grupos de poblaciones se basan en estratos espaciales diferentes, y las mortalidades por lance y el número total de lances varían espacialmente.

	Offshore spotted[1]		Spinner		Common			Others	Total
	North-eastern	Western-southern	Eastern	White belly	Northern	Central	Southern		
	Manchado de altamar[1]		Tornillo		Común			Otros	Total
	Nor-oriental	Occidental y sureño	Oriental	Panza blanca	Norteño	Central	Sureño		
1979	4,828	6,254	1,460	1,312	4,161	2,342	94	880	21,331
1980	6,468	11,200	1,108	8,132	1,060	963	188	633	29,752
1981	8,096	12,512	2,261	6,412	2,629	372	348	367	32,997
1982	9,254	9,869	2,606	3,716	989	487	28	1,347	28,296
1983	2,430	4,587	745	4,337	845	191	0	353	13,488
1984	7,836	10,018	6,033	7,132	0	7,403	6	156	38,584
1985	25,975	8,089	8,853	6,979	0	6,839	304	1,777	58,816
1986	52,035	20,074	19,526	11,042	13,289	10,884	134	5,185	132,169
1987	35,366	19,298	10,358	6,026	8,216	9,659	6,759	3,200	98,882
1988	26,625	13,916	18,793	3,545	4,829	7,128	4,219	2,074	81,129
1989	28,898	28,530	15,245	8,302	1,066	12,711	576	3,123	98,451
1990	22,616	12,578	5,378	6,952	704	4,053	272	1,321	53,874
1991	9,005	4,821	5,879	2,974	161	3,182	115	990	27,127
1992	4,657	1,874	2,794	2,044	1,773	1,815	64	518	15,539
1993	1,139	757	821	412	81	230	0	161	3,601
1994	935	1,226	743	619	101	151	0	321	4,096
1995	952	859	654	445	9	192	0	163	3,274
1996	818	545	450	447	77	51	30	129	2,547
1997	721	1,044	391	498	9	114	58	170	3,005
1998	298	341	422	249	261	172	33	101	1,877
1999	358	253	363	192	85	34	1	62	1,348
2000	295	435	275	262	54	223	10	82	1,636
2001	592	311	469	372	94	203	46	44	2,131
2002	442	204	405	186	69	155	4	50	1,515
2003	290	341	289	171	133	140	99	39	1,502
2004	252	255	220	214	159	100	222	47	1,469

[1] Estimates for offshore spotted dolphins include mortalities of coastal spotted dolphins.
[1] Las estimaciones de delfines manchados de altamar incluyen mortalidades de delfines manchados costeros.

TABLE 4. Standard errors of annual estimates of dolphin species and stock mortality for 1979-1994, and 2001-2003. There are no standard errors for 1995-2000, and 2004, because the coverage was at or nearly at 100% during those years.
TABLA 4. Errores estándar de las estimaciones anuales de la mortalidad de delfines por especie y población para 1979-1994, y 2001-2003. No hay errores estándar para 1995-2000, y 2004, porque la cobertura fue de 100%, o casi, en esos años.

	Offshore spotted		Spinner		Common			Other
	North-eastern	Western-southern	Eastern	Whitebelly	Northern	Central	Southern	
	Manchado de altamar		Tornillo		Común			Otros
	Nor-oriental	Occidental y sureño	Oriental	Panza blanca	Norteño	Central	Sureño	
1979	817	1,229	276	255	1,432	560	115	204
1980	962	2,430	187	3,239	438	567	140	217
1981	1,508	2,629	616	1,477	645	167	230	76
1982	1,529	1,146	692	831	495	168	16	512
1983	659	928	284	1,043	349	87	-	171
1984	1,493	2,614	2,421	3,773	-	5,093	3	72
1985	3,210	951	1,362	1,882	-	2,776	247	570
1986	8,134	2,187	3,404	2,454	5,107	3,062	111	1,722
1987	4,272	2,899	1,199	1,589	4,954	2,507	3,323	1,140
1988	2,744	1,741	1,749	668	1,020	1,224	1,354	399
1989	3,108	2,675	1,674	883	325	4,168	295	430
1990	2,575	1,015	949	640	192	1,223	95	405
1991	956	454	771	598	57	442	30	182
1992	321	288	168	297	329	157	8	95
1993	89	52	98	33	27	-	-	29
1994	69	55	84	41	35	8	-	20
2001	3	28	1	6	7	7	-	1
2002	1	2	1	1	1	1	1	1
2003	1	1	1	1	-	1	1	-

TABLE 5. Percentages of sets with no dolphin mortalities, with major gear malfunctions, with net collapses, with net canopies, average times of backdown (in minutes), and average number of live dolphins left in the net at the end of backdown.
TABLA 5. Porcentajes de lances sin mortalidad de delfines, con averías mayores, con colapso de la red, con abultamiento de la red, duración media del retroceso (en minutos), y número medio de delfines en la red después del retroceso.

	Sets with zero mortality (%)	Sets with major malfunctions (%)	Sets with net collapse (%)	Sets with net canopy (%)	Average duration of backdown (minutes)	Average number of live dolphins left in net after backdown
	Lances sin mortalidad (%)	Lances con averías mayores (%)	Lances con colapso de la red (%)	Lances con abultamiento de la red (%)	Duración media del retroceso (minutos)	Número medio de delfines en la red después del retroceso
1986	38.1	9.5	29.0	22.2	15.3	6.0
1987	46.1	10.9	32.9	18.9	14.6	4.4
1988	45.1	11.6	31.6	22.7	14.3	5.5
1989	44.9	10.3	29.7	18.3	15.1	5.0
1990	54.2	9.8	30.1	16.7	14.3	2.4
1991	61.9	10.6	25.2	13.2	14.2	1.6
1992	73.4	8.9	22.0	7.3	13.0	1.3
1993	84.3	9.4	12.9	5.7	13.2	0.7
1994	83.4	8.2	10.9	6.5	15.1	0.3
1995	85.0	7.7	10.3	6.0	14.0	0.4
1996	87.6	7.1	7.3	4.9	13.6	0.2
1997	87.7	6.6	6.1	4.6	14.3	0.2
1998	90.3	6.3	4.9	3.7	13.2	0.2
1999	91.0	6.6	5.9	4.6	14.0	0.1
2000	90.8	5.6	4.3	5.0	14.9	0.2
2001	91.6	6.5	3.9	4.6	15.6	0.1
2002	93.6	6.0	3.1	3.3	15.0	0.1
2003	93.9	5.2	3.5	3.7	14.5	<0.1
2004	93.8	5.4	3.4	3.4	15.2	<0.1

TABLE 6. Weekly reports of dolphin mortality received, 2004.
TABLA 6. Informes semanales de mortalidad de delfines recibidos, 2004

Fleet	Program	Weeks	Reports	%
Flota	**Programa**	**Semanas**	**Informes**	**%**
BOL	IATTC--CIAT	197	44	**22**
COL	IATTC--CIAT	235	14	**6**
ECU	IATTC--CIAT	895	634	**71**
	National--Nacional	455	293	**64**
EUR	IATTC--CIAT	71	71	**100**
	National--Nacional	74	74	**100**
GTM	IATTC--CIAT	26	26	**100**
HND	IATTC--CIAT	90	79	**88**
MEX	IATTC--CIAT	623	517	**83**
	National--Nacional	644	454	**70**
NIC	IATTC--CIAT	56	56	**100**
PAN	IATTC--CIAT	530	442	**83**
SLV	IATTC--CIAT	108	98	**91**
USA	IATTC--CIAT	109	107	**98**
	National--Nacional	6	6	**100**
VEN	IATTC--CIAT	378	327	**87**
	National--Nacional	302	262	**87**
VUT	IATTC--CIAT	138	122	**88**
Total		**4,937**	**3,626**	**73**

TABLE 7. Preliminary reports of the mortalities of dolphins in 2005, to May 8.
TABLA 7. Informes preliminares de las mortalidades de delfines en 2005, hasta el 8 de mayo.

Species and stock	Total mortality	Limit	Used (%)
Especie y población	**Mortalidad total**	**Límite**	**Usado (%)**
Offshore spotted dolphin – Delfín manchado de altamar			
Northeastern--Nororiental	125	648	19.3
Western-southern--Occidental-sureño	42	1,145	3.7
Spinner dolphin – Delfín tornillo			
Eastern--Oriental	91	518	17.6
Whitebelly--Panza blanca	26	871	3.0
Common dolphin – Delfín común			
Northern--Norteño	44	562	7.8
Central	22	207	10.6
Southern--Sureño	37	1,845	2.0
Others and unidentified--Otros y no identificados	43		
Total	**430**	**5,000**	**8.6**

TABLE 8. Summary of possible infractions identified by the International Review Panel at its 36th, 37th and 38th meetings.
TABLA 8. Resumen de posibles infracciones identificadas por el Panel Internacional de Revisión en sus reuniones 36, 37 y 38.

MAJOR INFRACTIONS:	
Trips without an observer	0
Trips with dolphin sets but no DML assigned	7
Trips with captains not on the AIDCP list	7
Trips without a dolphin safety panel	2
Intentional sets made after reaching the DML (occurred in 1 trip)	24
Sets or chases with use of explosives (occurred in 7 trips)	30
Sets on banned stocks or school types	0
Sets without a required backdown (occurred in 1 trip)	3
Sets with dolphin sack-up or brail	1
Sets with unavoided dolphin injury or mortality	1
Total	**75**
OTHER INFRACTIONS:	
Trips without a required raft	3
Trips with < 3 speedboats and/or missing towing bridles	0
Trips without a required high-intensity floodlight	15
Trips without required facemasks	0
Night sets (occurred in 13 trips)	17
Sets without required deployment of rescuer	0
Sets without continued rescue effort after backdown	0
Trips with dolphin sets before the DML notification	1
Total	**36**
Cases of observer interference	**5**
Trips reviewed in these meetings	**733**
Dolphin sets reviewed in these meetings	**11,733**
Accidental sets reviewed in these meetings	**5**

TABLE 9. Responses for six types of possible infractions identified by the International Review Panel at its 36th, 37th and 38th meetings.
TABLA 9. Respuestas para seis tipos de posibles infracciones identificadas por el Panel Internacional de Revisión en sus reuniones 36, 37 y 38.

	No. de casos	Sin respuesta		Respuestas: Bajo investigación[1]		No hubo infracción		Infracción: sin sanción		Infracción: aviso		Infracción: sanción[2]		Total	
	No. of cases	No response		Responses: Under investigation[1]		No infraction		Infraction: no sanction		Infraction: warning		Infraction: sanction[2]		Total	
HOSTIGAMIENTO AL OBSERVADOR – OBSERVER HARASSMENT															
ECU	2	2	(100%)	0	-	0	-	0	-	0	-	0	-	0	-
PAN	3	2	(67%)	1	(33%)	0	-	0	-	0	-	0	-	1	(33%)
Total[3]:	**5**	**4**	(80%)	**1**	(20%)	**0**	**-**	**0**	**-**	**0**	**-**	**0**	**-**	**1**	**(20%)**
USO DE EXPLOSIVOS – USE OF EXPLOSIVES															
BOL	5	5	(100%)	0	-	0	-	0	-	0	-	0	-	0	-
MEX	1	0	-	1	(100%)	0	-	0	-	0	-	0	-	1	(100%)
PAN	22	21	(95%)	1	(5%)	0	-	0	-	0	-	0	-	1	(5%)
VEN	2	0	-	2	(100%)	0	-	0	-	0	-	0	-	2	(100%)
Total:	**30**	**26**	(87%)	**4**	(13%)	**0**	**-**	**0**	**-**	**0**	**-**	**0**	**-**	**4**	**(13%)**
LANCES NOCTURNOS – NIGHT SETS															
BOL	1	1	(100%)	0	-	0	-	0	-	0	-	0	-	0	-
VEN	16	0	-	16	(100%)	0	-	0	-	0	-	0	-	16	(100%)
Total	**17**	**1**	**(6%)**	**16**	**(94%)**	**0**	**-**	**0**	**-**	**0**	**-**	**0**	**-**	**16**	**(94%)**
PESCAR SIN OBSERVADOR – FISHING WITHOUT AN OBSERVER															
Ningún caso identificado durante el periodo de este informe															
No identified cases during this report period															
PESCAR SOBRE DELFINES SIN LMD – FISHING ON DOLPHINS WITHOUT A DML															
BOL	5	5	(100%)	0	-	0	-	0	-	0	-	0	-	0	-
ECU	1	1	(100%)	0	-	0	-	0	-	0	-	0	-	0	-
VEN	1	0	-	1	(100%)	0	-	0	-	0	-	0	-	1	(100%)
Total	**7**	**6**	**(86%)**	**1**	**(14%)**	**0**	**-**	**0**	**-**	**0**	**-**	**0**	**-**	**1**	**(14%)**
LANCES SOBRE DELFINES DESPUES DE ALCANZAR EL LMD															
SETS ON DOLPHINS AFTER REACHING DML															
PAN	24	0	-	24	(100%)	0	-	0	-	0	-	0	-	24	(100%)
Total	**24**	**0**	**-**	**24**	**(100%)**	**0**	**-**	**0**	**-**	**0**	**-**	**0**	**-**	**24**	**(100%)**

[1] Incluye casos sujetos a litigio administrativo – Includes cases subject to administrative litigation
[2] Una sanción fue o será aplicada – Sanction was or will be applied
[3] Se redondean los porcentajes, y no suman necesariamente 100 - Percentages are rounded and may not sum to 100

Appendix A.

POSSIBLE INFRACTIONS IDENTIFIED BY THE IRP

Brief descriptions of government actions taken, as reported to the Secretariat by May 11, 2005, are included. If no action is listed for a possible infraction, the Secretariat has not received a response from the government.

The "Others" category includes all fleets with three vessels or less (El Salvador, Guatemala, Honduras, Nicaragua).

Abbreviations: DSP = Dolphin Safety Panel

BOLIVIA			
Vessel	*IRP recno*	*Review date*	*Identified infractions*
BOL 1	2004-486	2005/02	1) 1 Trip with dolphin sets but no DML assigned
	2004-666	2005/02	1) 1 Trip with dolphin sets but no DML assigned
BOL 2	2004-682	2005/02	1) 1 Trip with dolphin sets before the DML notification
BOL 3	2004-152	2004/06	1) 1 Trip with dolphin sets but no DML assigned
		2004/06	2) 1 Night set
		2004/06	3) 5 Sets or chases with use of explosives
			Action taken: 1), 2), 3) None Reported.
	2004-329	2004/10	1) 1 Trip with dolphin sets but no DML assigned
	2004-569	2005/02	1) 1 Trip with dolphin sets but no DML assigned
BOL 4	2004-213	2004/10	1) 1 Trip without a required high intensity floodlight
	2004-374	2004/10	1) 1 Trip without a required high intensity floodlight

COLOMBIA			
Vessel	*IRP recno*	*Review date*	*Identified infractions*
COL 1	2004-013	2004/06	1) 1 Trip with captain not on the AIDCP list
			Action taken: 1) The government is investigating the possible infractions.
COL 2	2004-118	2004/06	1) 1 Trip without a required raft
			Action taken: 1) The government initiated the proper administrative process to investigate the possible infractions.
	2004-279	2004/10	1) 1 Trip without a required raft

ECUADOR			
Vessel	*IRP recno*	*Review date*	*Identified infractions*
ECU 1	2004-338	2004/10	1) 1 Trip with dolphin sets but no DML assigned
		2004/10	2) 1 Case of observer interference
ECU 2	2004-304	2004/10	1) 1 Case of observer interference
ECU 3	2003-859	2004/06	1) 1 Trip with captain not on the AIDCP list
			Action taken: 1) The government is investigating the possible infractions.
ECU 4	2003-863	2004/06	1) 1 Trip with captain not on the AIDCP list
		2004/06	2) 1 Trip without a dolphin safety panel
			Action taken: 1), 2) The government is investigating the possible infractions.
	2004-167	2004/10	1) 1 Trip without a dolphin safety panel
		2004/10	2) 1 Trip without a required high intensity floodlight

MEXICO			
Vessel	*IRP recno*	*Review date*	*Identified infractions*
MEX 1	2004-275	2004/10	1) 1 Trip without a required high intensity floodlight
			Action taken: 1) The government decided that no infraction occurred, but issued a warning to the vessel owner.
MEX 2	2004-077	2004/06	1) 1 Trip without a required high intensity floodlight
			Action taken: 1) After investigating, the government decided that no infraction occurred, but issued a warning to the vessel owner to obtain the required equipment.
	2004-287	2004/10	1) 1 Set or chase with use of explosives
		2004/10	2) 1 Trip without a required high intensity floodlight
			Action taken: 1) The case is subject to administrative litigation. 2) The government decided that no infraction occurred, but issued a warning to the vessel owner.

MEX 3	2004-472	2004/10	1) 1 Trip without a required high intensity floodlight **Action taken:** 1) The government decided that no infraction occurred, but issued a warning to the vessel owner.
MEX 4	2004-497	2005/02	1) 1 Trip with captain not on the AIDCP list
MEX 5	2004-097	2004/06	1) 1 Trip with captain not on the AIDCP list **Action taken:** 1) The government decided that no infraction occurred, but issued a warning to the vessel owner.
MEX 6	2004-159	2004/06	1) 1 Trip with captain not on the AIDCP list **Action taken:** 1) The government decided that no infraction occurred, but issued a warning to the vessel owner.
MEX 7	2004-120	2004/06	1) 1 Set with unavoided dolphin injury or mortality **Action taken:** 1) The government determined that there was no infraction, but notified vessel management that the fishing captain is required to attend an AIDCP instructional seminar.
MEX 8	2004-156	2004/06	1) 1 Trip without a required high intensity floodlight **Action taken:** 1) After investigating, the government decided that no infraction occurred, but issued a warning to the vessel owner to obtain the required equipment.
MEX 9	2004-583	2005/02	1) 1 Trip without a required high intensity floodlight
	2004-612	2005/02	1) 1 Trip without a required high intensity floodlight
MEX 10	2004-536	2005/02	1) 1 Trip without a required high intensity floodlight

PANAMA

Vessel	*IRP recno*	*Review date*	*Identified infractions*
PAN 1	2004-268	2004/10	1) 1 Trip without a required high intensity floodlight
	2004-462	2005/02	1) 3 Sets without a required backdown
		2005/02	2) 1 Set with dolphin sack-up or brail
		2005/02	3) 1 Case of observer interference
		2005/02	4) 19 Sets or chases with use of explosives
PAN 2	2004-521	2005/02	1) 1 Case of observer interference
		2005/02	2) 2 Sets or chases with use of explosives
PAN 3	2004-469	2004/10	1) 24 Intentional sets made after reaching the DML
		2004/10	2) 1 Case of observer interference
		2004/10	3) 1 Set or chase with use of explosives
			Action taken: 1), 2), 3) The government is investigating the possible infractions.

VENEZUELA

Vessel	*IRP recno*	*Review date*	*Identified infractions*
VEN 1	2004-197	2004/10	1) 1 Night set **Action taken:** 1) The government is investigating the possible infractions.
VEN 2	2004-140	2004/06	1) 1 Night set **Action taken:** 1) The government is investigating the possible infractions.
VEN 3	2004-110	2004/06	1) 1 Night set
		2004/06	2) 1 Trip without a required high intensity floodlight **Action taken:** 1), 2) The government is investigating the possible infractions.
VEN 4	2004-045	2004/06	1) 1 Night set **Action taken:** 1) The government is investigating the possible infractions.
	2004-308	2004/10	1) 1 Night set **Action taken:** 1) The government is investigating the possible infractions.
	2004-476	2005/02	1) 2 Night sets **Action taken:** 1) The government is investigating the possible infractions.
VEN 5	2003-755	2004/06	1) 1 Night set **Action taken:** 1) The government is investigating the possible infractions.
	2004-504	2005/02	1) 2 Night sets **Action taken:** 1) The government is investigating the possible infractions.
VEN 6	2004-206	2004/10	1) 1 Night set
		2004/10	2) 1 Trip without a required high intensity floodlight **Action taken:** 1), 2) The government is investigating the possible infractions.

	2004-390	2004/10	1) 1 Trip without a required high intensity floodlight **Action taken:** 1) The government is investigating the possible infractions.
VEN 7	2004-055	2004/06 2004/06	1) 1 Trip with captain not on the AIDCP list 2) 3 Night sets **Action taken:** 1), 2) The government is investigating the possible infractions.
	2004-662	2005/02	1) 1 Night set **Action taken:** 1) The government is investigating the possible infractions.
VEN 8	2004-069	2004/06	1) 1 Night set **Action taken:** 1) The government is investigating the possible infractions.
VEN 9	2004-277	2004/10	1) 1 Set or chase with use of explosives **Action taken:** 1) The government is investigating the possible infractions.
VEN 10	2004-559	2005/02	1) 1 Set or chase with use of explosives **Action taken:** 1) The government is investigating the possible infractions.
VEN 11	2004-089	2004/06	1) 1 Trip with dolphin sets but no DML assigned **Action taken:** 1) The government is investigating the possible infractions.

OTHERS

Vessel	*IRP recno*	*Review date*	*Identified infractions*
OTH 1	2004-684	2005/02	1) 1 Trip without a required raft