

AGREEMENT ON THE INTERNATIONAL DOLPHIN CONSERVATION PROGRAM

15TH MEETING OF THE PARTIES

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REPORT ON THE INTERNATIONAL DOLPHIN CONSERVATION PROGRAM

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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 a 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 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, 2005, Costa Rica, Ecuador, El Salvador, the European Union, Guatemala, Honduras, Mexico, Nicaragua, Panama, Peru, United States, Vanuatu, and Venezuela have ratified or acceded to the Agreement, and Bolivia and Colombia 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 Colombia (Programa Nacional de Observadores de Colombia, PNOC, which began operations in January 2005), 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. A national program for Panama (Programa Nacional de Observadores Panameños; PRONAOP) was initiated, with observer placements beginning in 2006.

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 2005, the Ecuadoran program had a goal of sampling approximately one-third of the trips by its fleet, and Colombian, the European Union, Mexican, and Venezuelan programs each had a goal of sampling approximately half of the trips by their respective fleets. However, the program of the European Union was inactive from early 2005 until February 2006. The IATTC program covered the remainder of the trips by these five fleets, plus all trips by vessels of other fleets, except as noted below.

During 2005, observers from the On-Board Observer Program departed on 808 fishing trips (Table 1). In addition, 53 vessels whose last trip of 2004 carried over into 2005 had observers aboard, bringing the total to 861 trips observed in 2005 by the Program. Five Panamanian-flag vessels each began a trip under the flag of Venezuela, and those trips were sampled by the PNOV. The Program covered vessels operating under the jurisdictions of Colombia, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Spain, the United States, Vanuatu, and Venezuela.

In 2005 the Program sampled 100% of trips by vessels covered by the AIDCP, and the IATTC program sampled 68% of all trips.

2.2. Observer training

The IATTC staff participated in the Colombian national observer program's first training session, held for 16 trainees in Bogota, Colombia, from February 22 to March 11, 2005. In April 2005, a training course for IATTC observers was held in Cumana, Venezuela. It was attended by 8 trainees. In November 2005, a training course for IATTC observers was held in Manta, Ecuador. It was attended by 19 trainees, 8 from Ecuador, 5 from Panama, and 6 trainees from the Ecuadorian national observer program.

3. DOLPHIN MORTALITY

3.1. Dolphin Mortality Limits (DMLs)

3.1.1. 2005 DMLs

The overall dolphin mortality limit (DML) for the international fleet in 2005 was 5,000 animals, and the unreserved portion of 4,900 was allocated to 98 vessels that requested and were qualified to receive DMLs. The average individual-vessel DML (ADML), based on 98 DML requests, was 50. However, two vessels renounced their DMLs before utilizing them, and a Party canceled the DML of a vessel that had changed flag. Ten vessels did not utilize their DMLs prior to April 1, but all were allowed to keep them for the remainder of the year under the *force majeure* exemption allowed by the AIDCP. A total of 93 vessels utilized their full-year DMLs. In addition, four vessels were allocated DMLs from the Reserve DML Allocation (RDA), three vessels receiving DMLs of 20 and one vessel receiving a DML of 15. All of those DMLs were utilized. Three vessels were allocated second-semester DMLs of 16, two of which were utilized.

At the end of the first quarter of 2005, the Secretariat sent letters to two Parties, advising the first Party that two of its vessels risked exceeding their assigned DMLs if their mortality levels continued to accumulate at their current rates, and advising the second Party of the same situation regarding one of its

vessels. At the end of the second quarter, the Secretariat advised the first Party that the same 2 vessels risked exceeding their assigned DMLs if their mortality levels continued to accumulate at their current rates, and advised a third Party of the same situation regarding one of its vessels. No vessel exceeded its DML in 2005. The distribution of the mortality caused in 2005 by vessels with DMLs is shown in Figure 1.

3.1.2. 2006 DMLs

One hundred and three eligible vessels requested and received DMLs for 2006 from the unreserved portion (4,900) of the overall fleet mortality limit. The ADML is 47.57. Three vessels renounced their DMLs before utilizing them, and four vessels forfeited their DMLs by not utilizing them prior to April 1. There were no second-semester DMLs requested, and as of May 29, 2006, there have been no requests for DMLs from the Reserve DML Allocation.

3.2. Preliminary estimates of the mortality of dolphins in 2005 due to fishing

The preliminary estimate of the incidental mortality of dolphins in the fishery in 2005 is 1,151 animals (Table 2), a 21.6% decrease over the 1,469 mortalities recorded in 2004. The mortalities for 1979-2005, 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 and the relative mortalities (mortality/abundance) are also shown in Table 2. The stock with the highest levels of relative mortality (0.05%) was the eastern spinner dolphin.

The number of sets on dolphin-associated schools of tuna made by Class-6 vessels rose by 3%, from 11,783 in 2004 to 12,173 in 2005, and this type of set accounted for 48% of the total number of sets made in 2005, compared to 52% in 2004. The average mortality per set decreased from 0.12 dolphins in 2004 to 0.09 dolphins in 2005. The estimated spatial distribution of the average mortalities per set during 2005 is shown in Figure 4. Typically, patches of relatively high mortalities per set are found throughout the fishing area; in 2005 the higher-mortality areas were west of the Galapagos Islands, off the tip of Baja California, off southern Mexico, and at the far western edge of the fishery, particularly along the 10°N 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 6% in 2005, as compared to 2004. The percentage of the catch of yellowfin taken in sets on dolphins decreased from 69% of the total catch in 2004 to 68% of the catch in 2005, and the average catch of yellowfin per set on dolphins decreased from 15 to 14 metric tons. The mortality of dolphins per metric ton of yellowfin caught decreased from 0.0080 in 2004 to 0.0067 in 2005.

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 1986-2005 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 95% in 2005, 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 2005 (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 1998-2005; 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 2005, the reporting rate averaged 89% (Table 6),.

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 2006 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. During 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 2005, 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 2005:

Meeting	Venue	Dates
38	La Jolla, California	February 16
39	Lanzarote, Spain	June 14
40	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 2005 with an IDCP observer aboard were issued TTFs.

6. AMENDMENTS AND RESOLUTIONS AFFECTING THE OPERATION OF THE IDCP

The 13th Meeting of the Parties passed one resolution that affects the operation of the IDCP. [Resolution A-05-01](#) provided that vessels whose well volume had been established by an agreed procedure would have their assessments based on that volume and others would have their well volumes established in accordance with [Resolution A-03-01](#), and increased the assessment rate for observed vessels. During 2005, the following [amendments](#) were made to the Annexes of the Agreement or adopted as other measures to strengthen the Agreement:

1. Procedures were agreed for ensuring the proper measurement of all purse-seine vessels and the verification of vessel well volumes.
2. Guidelines were agreed for waiving the requirement for an observer to be on board the vessel during a transit, designed to ensure that vessels will not fish during any such transit.
3. Annex IV of the AIDCP was amended to:
 - a. establish that no vessel which has been assigned a DML for any given year from the RDA may also receive a full-year or second-semester DML for that same year, and no vessel which has received a full-year or second-semester DML for any given year may also receive a DML from the RDA for that same year.
 - b. establish a deadline for the utilization of DMLs from the Reserve DML Allocation.
 - c. clarify the effect of a Party renouncing a DML assigned to one of its vessels.
 - d. require that a Party must have a national plan for tracking and verifying tuna in order for any of its vessels to be eligible to receive a DML.
4. Annex VII of the AIDCP was amended to change the requirement the IRP hold at least three meetings a year to two meetings a year.
5. The [Procedures for AIDCP dolphin-safe certification](#) were modified to provide for submission of the certificates within 15 days instead of 5.
6. A [Protocol](#) was adopted for publicizing the numbers of Tuna Tracking Forms for tuna caught in contravention of IATTC resolutions.
7. Agreement was reached to initiate a dolphin life history sampling program, contingent upon the availability of funding.
8. The use of a new data screening technique to improve the evaluation of captain and vessel performance in reducing dolphin mortality was agreed.

7. OTHER FUNCTIONS PERFORMED BY THE SECRETARIAT

7.1. Dolphin safety panel alignments

During 2005, the IATTC staff conducted alignments of dolphin-safety panels (DSPs) and inspections of dolphin rescue gear aboard 15 vessels, 12 registered in Mexico, 2 registered in Nicaragua and one registered in Venezuela. 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 provides 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 2005, the the Venezuelan national program staff conducted one seminar in Caracas, Venezuela, and the National Marine Fisheries Service of the United States conducted two seminars, both in Long Beach, California. A total of 12 fishermen attended the three seminars. No seminars were conducted by the IATTC staff or the staffs of the other national programs.

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 2005, statements of the first type were issued for 109 fishing trips by vessels of Ecuador, El Salvador, Guatemala, Honduras, Nicaragua, Panama, Spain, 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 2004 and 2005. The patterns were largely similar between the two years, although some unassociated sets were made much further west in 2005 than previously.

In collaboration with the Department of Statistics at the University of California, Los Angeles, the IATTC staff has 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.

MORTALIDAD CAUSADA POR BARCOS CON LMD - 2005
MORTALITY CAUSED BY DML VESSELS - 2005

(Uso de LMD = 1 o más lances intencionales sobre delfines
DML use = 1 or more intentional sets on dolphins)

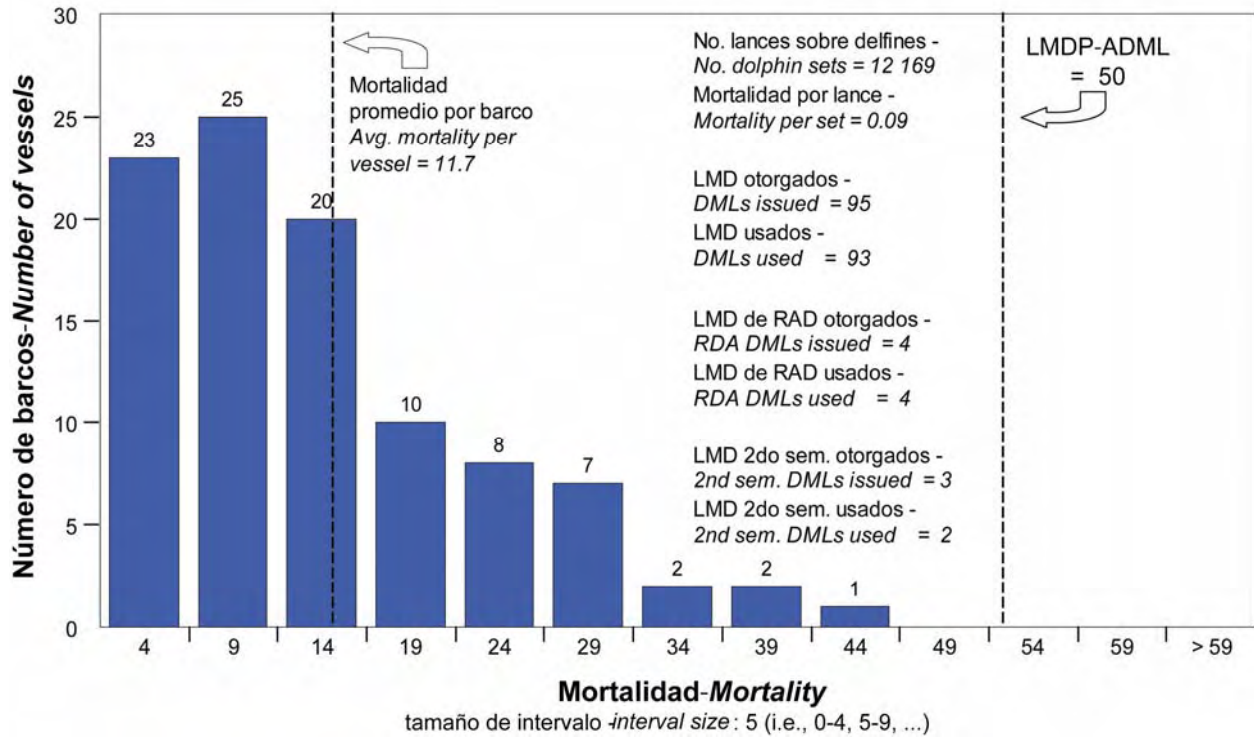


FIGURE 1. Distribution of dolphin mortality caused by vessels with DMLs during 2005.

FIGURA 1. Distribución de la mortalidad de delfines causada por buques con LMD durante 2005.

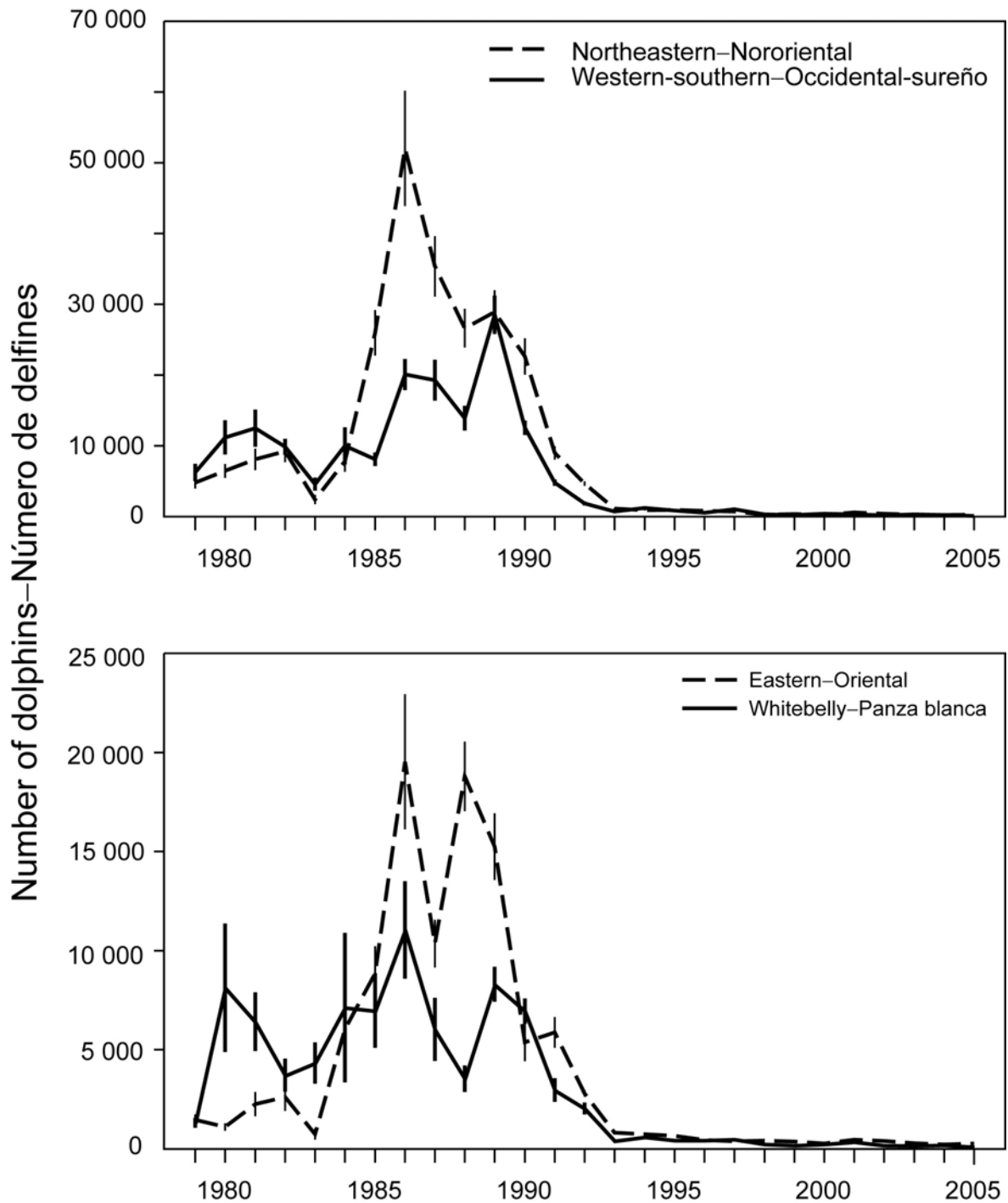


FIGURE 2. Estimated mortalities for the stocks of spotted (upper panel) and spinner (lower panel) dolphins in the eastern Pacific Ocean, 1979-2005. Each vertical line represents one positive and one negative standard error.

FIGURA 2. Mortalidad estimada de las poblaciones de delfines manchados (panel superior) y tornillo (panel inferior) en el Océano Pacífico oriental, 1979-2005. Cada línea vertical representa un error estándar positivo y un error estándar negativo.

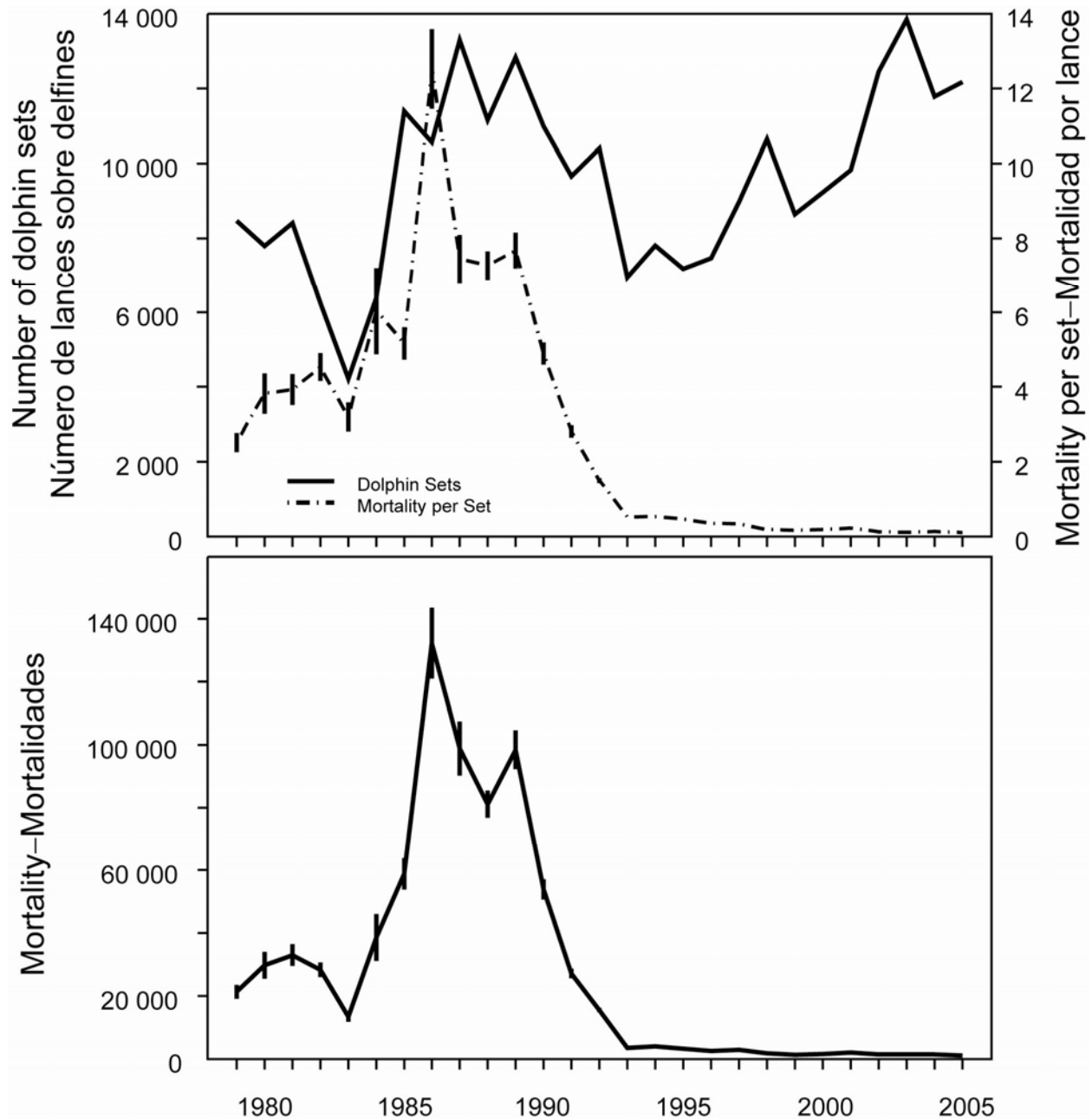


FIGURE 3. Total number of dolphin sets and average mortality per set (upper panel) and estimated total mortality (lower panel) for all dolphins in the EPO, 1979-2005. Each vertical line represents one positive and one negative standard error.

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, 1979-2005. Cada línea vertical representa un error estándar positivo y un error estándar negativo.

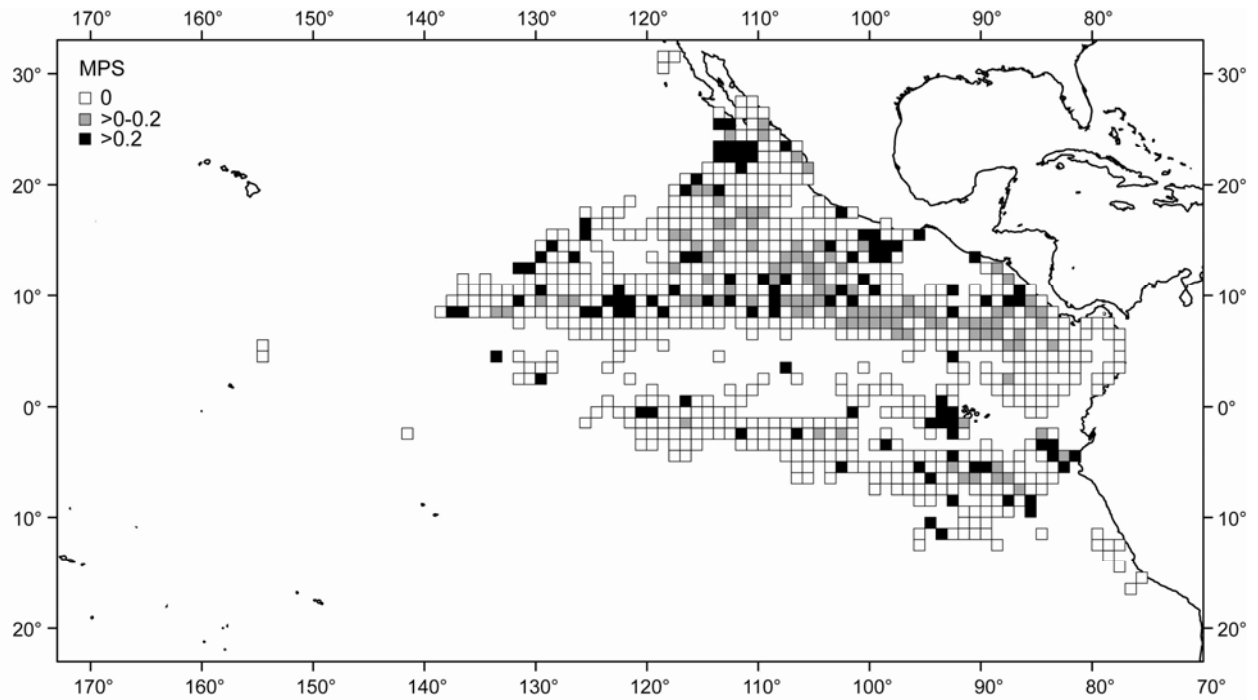


FIGURE 4. Spatial distribution of the average mortality of dolphins per set for all stocks combined, 2005.

FIGURA 4. Distribución de la mortalidad media de delfines por lance para todas las poblaciones combinadas, 2005.

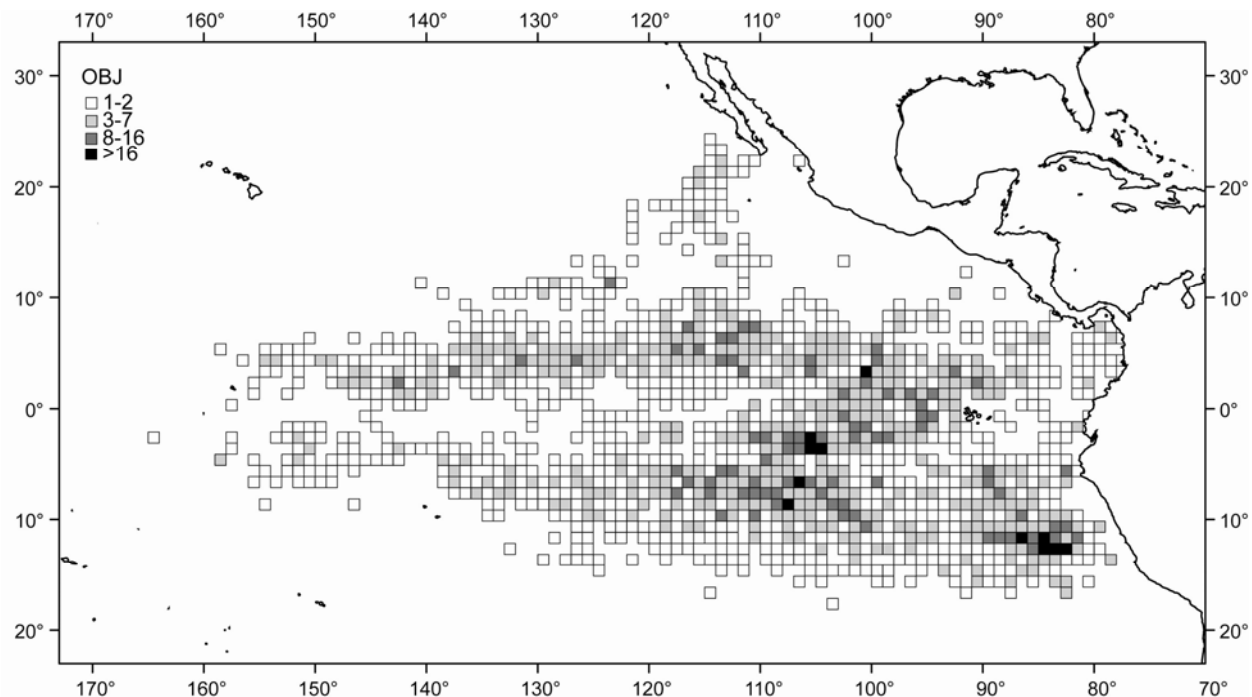


FIGURE 5a. Spatial distribution of sets on tuna associated with floating objects, 2004.
FIGURA 5a. Distribución espacial de los lances sobre atunes asociados con objetos flotantes, 2004.

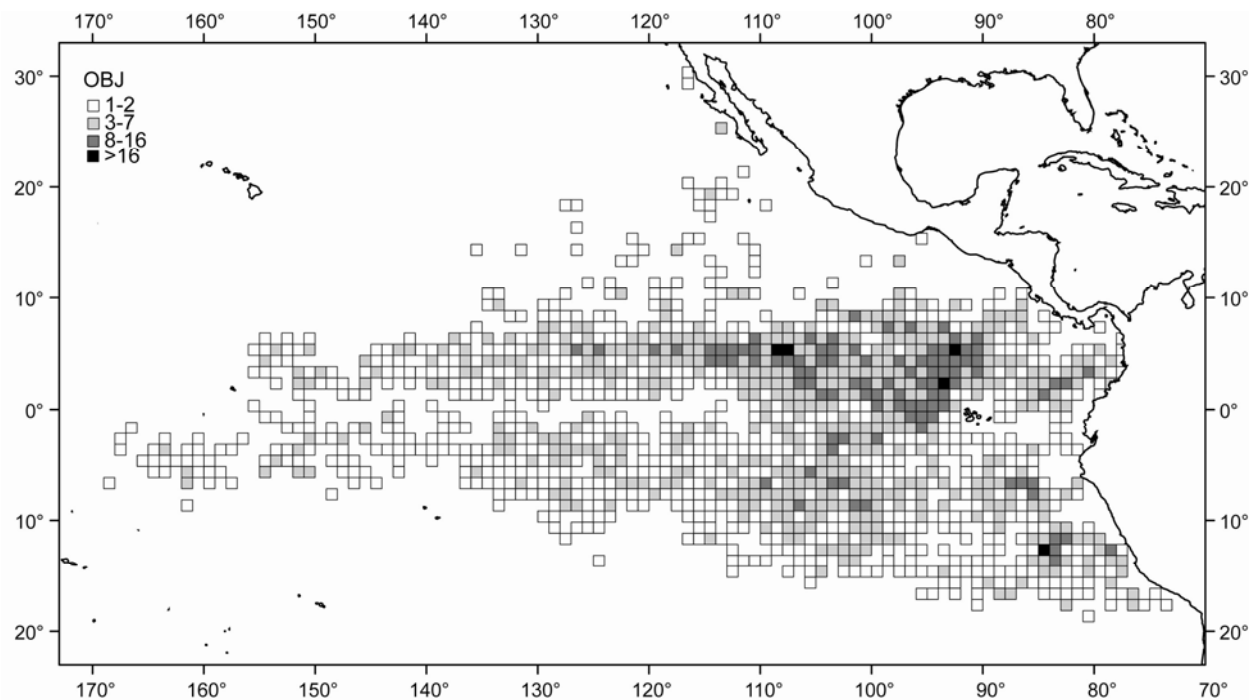


FIGURE 5b. Spatial distribution of sets on tuna associated with floating objects, 2005.
FIGURA 5b. Distribución espacial de los lances sobre atunes asociados con objetos flotantes, 2005.

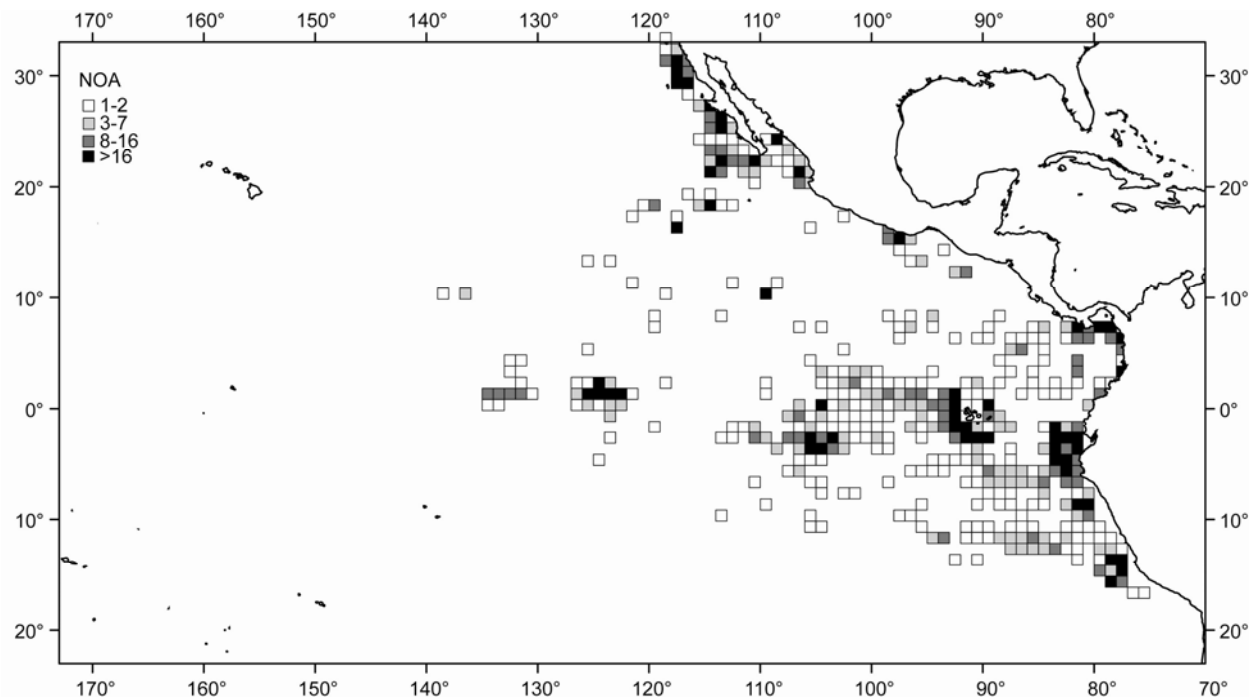


FIGURE 6a. Spatial distribution of sets on unassociated schools of tunas, 2004.

FIGURA 6a. Distribución espacial de lances sobre cardúmenes de atunes no asociados, 2004.

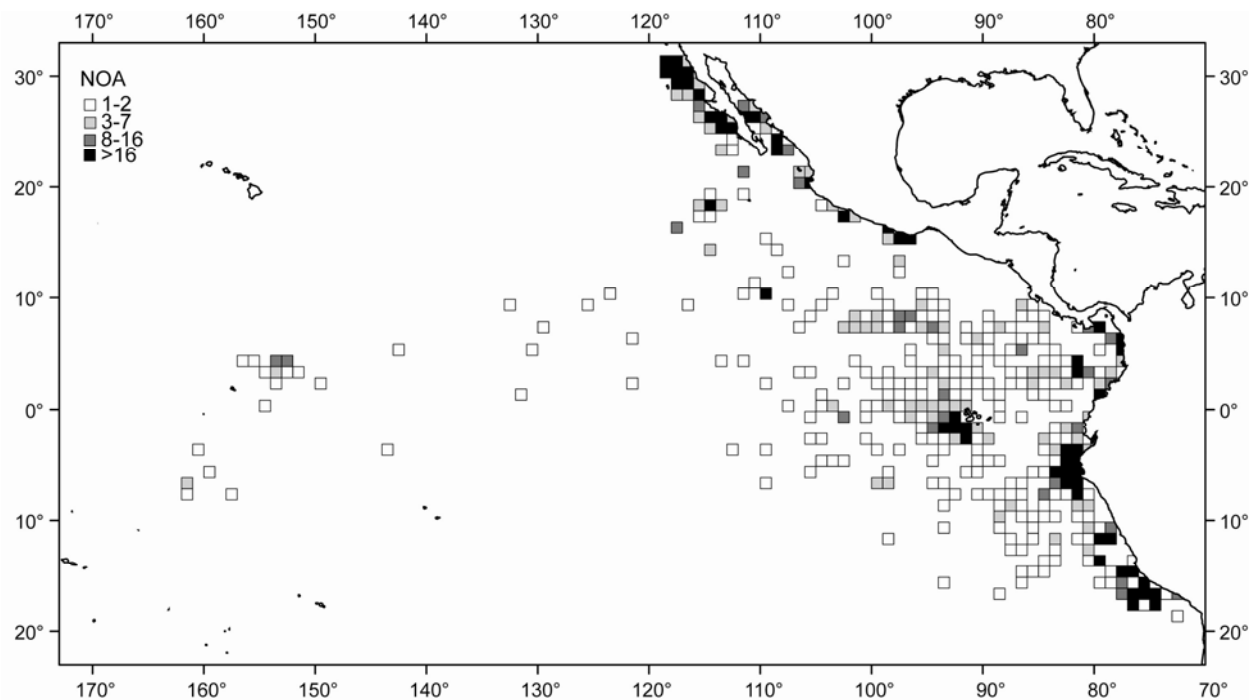


FIGURE 6b. Spatial distribution of sets on unassociated schools of tunas, 2005.

FIGURA 6b. Distribución espacial de lances sobre cardúmenes de atunes no asociados, 2005.

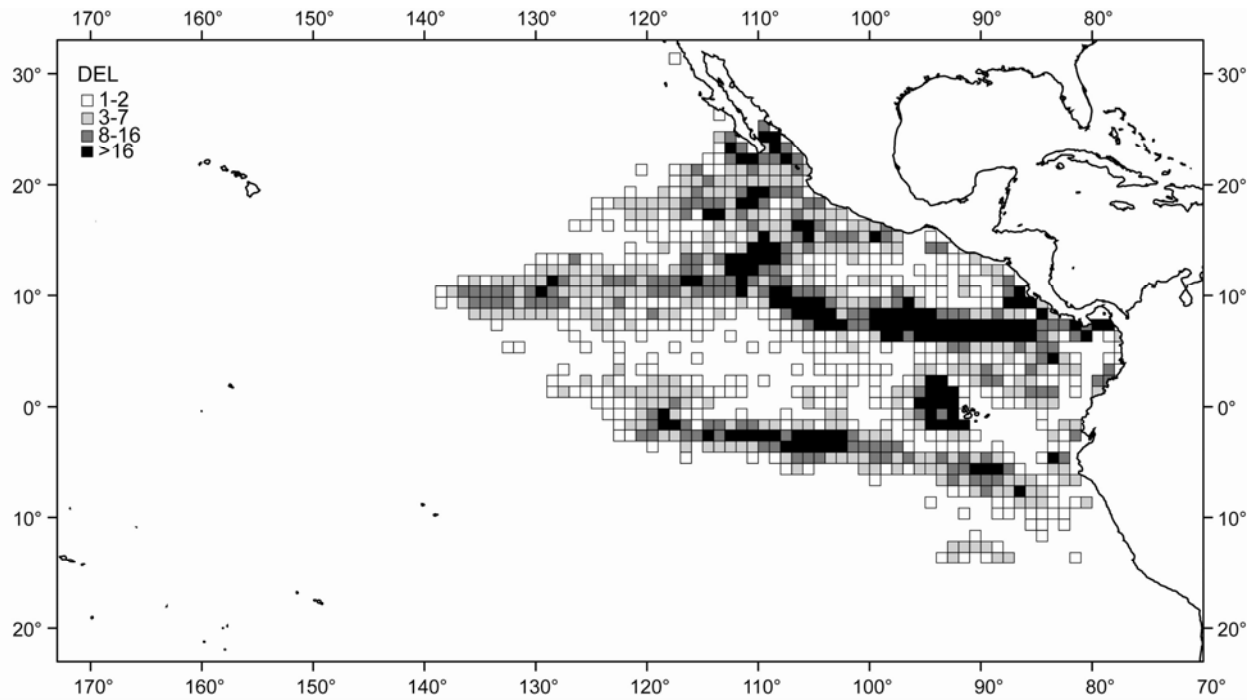


FIGURE 7a. Spatial distribution of sets on tuna associated with dolphins, 2004.

FIGURA 7a. Distribución espacial de los lances sobre atunes asociados con delfines, 2004.

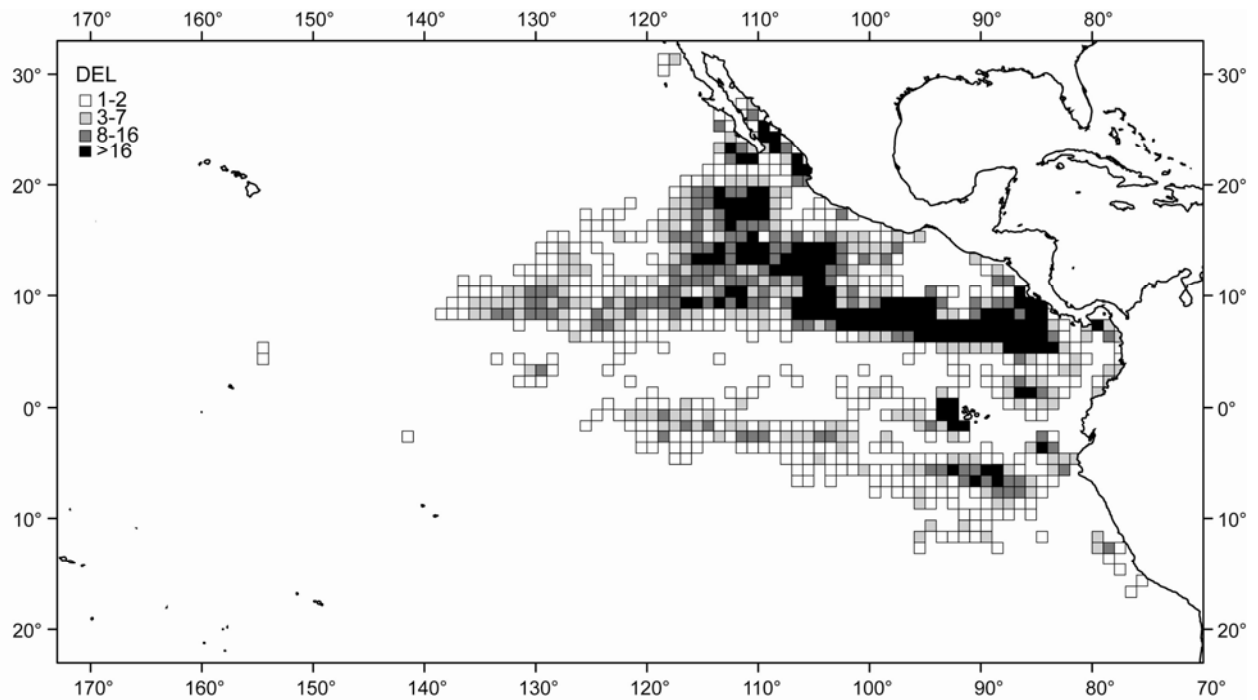


FIGURE 7b. Spatial distribution of sets on tuna associated with dolphins, 2005.

FIGURA 7b. Distribución espacial de los lances sobre atunes asociados con delfines, 2005.

TABLE 1. Sampling coverage by the On-Board Observer Program during 2005.

TABLA 1. Cobertura por el Programa de Observadores a Bordo durante 2005.

Flota nacional	Viajes	Observado por programa:			% observado	
		CIAT	Nacional	Total		
National fleet	Trips	Observed by program:			% observed	
		IATTC	National	Total		
Vessels of ≥363 t carrying capacity – Buques de capacidad de acarreo ≥ 363 t						
Colombia	COL	48	30	18	48	100
Ecuador	ECU	313	207	106	313	100
España—Spain	ESP	20	19	1	20	100
Guatemala	GTM	4	4	-	4	100
Honduras	HON	20	20	-	20	100
México	MEX	216	109	107	216	100
Nicaragua	NIC	20	20	-	20	100
Panamá	PAN	99	94	5 ¹	99	100
El Salvador	SLV	18	18	-	18	100
USA—EE.UU.	USA	4	4	-	4	100
Venezuela	VEN	87	45	42	87	100
Vanuatu	VUT	12	12	-	12	100
Venezuela	VEN	87	45	42	87	100
Subtotal²		861	582	279	861	100
Other vessels – Otros buques³						
		10	7	3	10	
Total		871	589	282	871	

¹ In these five cases, the vessel's change of registration took effect during a trip. At departure the vessels were Venezuelan, and thus were sampled by the PNOV; at the end they were Panamanian, and per IATTC policy, the trip is assigned to the vessel's flag at the end of the trip – En estos cinco casos, el cambio de registro tuvo lugar durante un viaje. Al inicio los buques eran de Venezuela, y por lo tanto fueron muestreados por el PNOV; al fin eran de Panamá, y conforme a las normas de la CIAT, se asigna el viaje al pabellón de fin de viaje

² Includes 53 trips that began in late 2004 and ended in 2005 - Incluye 53 viajes iniciados a fines de 2004 y terminados en 2005.

³ One vessel of less than 363 t capacity was required to carry an AIDCP observer on all trips made while being investigated for a possible AIDCP infraction – Se exigió de un buque de menos de 363 t de capacidad llevar observador del APICD en todos sus viajes mientras estaba bajo investigación por una posible infracción del APICD.

TABLE 2. Estimates of mortalities of dolphins in 2005, population abundance, and relative mortality, by stock. Data for 2005 are preliminary.

TABLA 2. Estimaciones de la mortalidad incidental de delfines en 2005, la abundancia de poblaciones, y la mortalidad relativa, por población. Los datos de 2005 son preliminares.

Species and stock	Incidental mortality	Population abundance	Relative mortality (%)
Especie y población	Mortalidad incidental	Abundancia de la población	Mortalidad relativa (%)
Offshore spotted dolphin—Delfín manchado de altamar ¹			
Northeastern—Nororiental	271	782,900	0.03
Western/southern—Occidental y sureño	99	892,600	0.01
Spinner dolphin—Delfín tornillo ¹			
Eastern—Oriental	274	592,200	0.05
Whitebelly—Panza blanca	115	617,100	0.02
Common dolphin—Delfín común ²			
Northern—Norteño	114	449,462	0.03
Central	57	577,048	<0.01
Southern—Sureño	154	1,525,207	0.01
Other dolphins—Otros delfines ^{3,4}	67	2,802,300	<0.01
Total	1,151		

¹ logistic model for 1986-2003 (IATTC Special Report 14: Appendix 7);

¹ modelo logístico para 1986-2003 (Informe Especial de la CIAT 14: Anexo 7)

² weighted averages for 1998-2003 (IATTC Special Report 14: Appendix 5)

² promedios ponderados para 1998-2003 (Informe Especial de la CIAT 14: Anexo 5)

³ pooled for 1986-1990 (Report of the International Whaling Commission, 43: 477-493)

³ agrupados para 1986-1990 (Informe de la Comisión Ballenera Internacional, 43: 477-493)

⁴ "Other dolphins" includes the following species and stocks, whose observed mortalities were as follows: striped dolphins (*Stenella coeruleoalba*), 15; coastal spotted dolphin (*Stenella attenuata*), 3; Central American spinner dolphin (*Stenella longirostris centroamericana*) 11; bottlenose dolphin (*Tursiops truncatus*) 7; Fraser's dolphin (*Lagenodelphis hosei*), 1; and unidentified dolphins, 30.

⁴ "Otros delfines" incluye las siguientes especies y poblaciones, con las mortalidades observadas correspondientes: delfín listado (*Stenella coeruleoalba*), 15; delfín manchado costero (*Stenella attenuata*), 3; delfín tornillo centroamericano (*Stenella longirostris centroamericana*) 11; tonina (*Tursiops truncatus*) 7; delfín de Fraser (*Lagenodelphis hosei*), 1; y delfines no identificados, 30.

TABLE 3. Annual estimates of dolphin mortality, by species and stock, 1979-2005. The data for 2005 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 1995-2005 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, 1979-2005. Los datos de 2005 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 1995-2005 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	260	256	224	214	156	100	222	37	1,469
2005	274	99	274	115	114	57	154	64	1,151

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 2004-2005, 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 2004-2005, 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
2005	94.9	5.0	2.6	2.7	14.5	<0.1

TABLE 6. Weekly reports of dolphin mortality received, 2005.**TABLA 6.** Informes semanales de mortalidad de delfines recibidos, 2005.

Fleet	Program	Weeks	Reports	%
Flota	Programa	Semanas	Informes	%
COL	IATTC--CIAT	284	192	68
	National--Nacional	241	198	82
ECU	IATTC--CIAT	1,150	1,032	90
	National--Nacional	618	485	78
EUR	IATTC--CIAT	141	141	100
GTM	IATTC--CIAT	41	41	100
HND	IATTC--CIAT	105	105	100
MEX	IATTC--CIAT	717	681	95
	National--Nacional	757	609	80
NIC	IATTC--CIAT	168	168	100
PAN	IATTC--CIAT	706	689	98
	National--Nacional	47	47	100
SLV	IATTC--CIAT	121	116	96
USA	IATTC--CIAT	40	40	100
VEN	IATTC--CIAT	406	378	93
	National--Nacional	358	342	96
VUT	IATTC--CIAT	91	90	99
Total		5,991	5,354	89
Fleet	Program	Weeks	Reports	%

TABLE 7. Preliminary reports of the mortalities of dolphins in 2006, to May 14.**TABLA 7.** Informes preliminares de las mortalidades de delfines en 2006, hasta el 14 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	83	648	12.8
Western-southern--Occidental-sureño	35	1,145	3.1
Spinner dolphin – Delfín tornillo			
Eastern--Oriental	68	518	13.1
Whitebelly--Panza blanca	22	871	2.5
Common dolphin – Delfín común			
Northern--Norteño	80	562	14.2
Central	25	207	12.1
Southern--Sureño	27	1,845	1.5
Others and unidentified--Otros y no identificados	15		
Total	355	5,000	7.1

TABLE 8. Summary of possible infractions identified by the International Review Panel at its 39th and 40th meetings.

TABLA 8. Resumen de posibles infracciones identificadas por el Panel Internacional de Revisión en sus reuniones 39 y 40.

INFRACCIONES MAYORES / MAJOR INFRACTIONS:	
Viaje sin observador Trips without an observer	0
Viajes con lances en delfines sin LMD asignado Trips with dolphin sets but no DML assigned	3
Viajes con capitanes no incluidos en la lista del APICD Trips with captains not on the AIDCP list	2
Viajes sin paño de protección de delfines Trips without a dolphin safety panel	0
Lances intencionales después de alcanzar el LMD Intentional sets made after reaching the DML	0
Lances o cazas con uso de explosivos (ocurrieron en 4 viajes) Sets or chases with use of explosives (occurred in 4 trips)	10
Lances sobre stocks o tipos de manadas prohibidas Sets on banned stocks or school types	0
Lances sin retroceso Sets without a required backdown	1
Lances con embolsamiento o salabardeo de delfines Sets with dolphin sack-up or brail	1
Lances sin evitar herir o matar delfines Sets with unavoided dolphin injury or mortality	1
Total	18
OTRAS INFRACCIONES / OTHER INFRACTIONS:	
Viajes sin balsa Trips without a required raft	3
Viajes con < 3 lanchas rápidas y/o sin bridas de remolque Trips with < 3 speedboats and/or missing towing bridles	0
Viajes sin reflector de alta intensidad Trips without a required high-intensity floodlight	5
Viajes sin máscaras de buceo Trips without required facemasks	0
Lances nocturnos (ocurrieron en 9 viajes) Night sets (occurred in 9 trips)	12
Lances sin rescate adicional Sets without required deployment of rescuer	0
Lances sin rescate después del retroceso Sets without continued rescue effort after backdown	0
Viajes con lances sobre delfines antes de la notificación del LMD Trips with dolphin sets before the DML notification	6
Total	26
Casos de interferencia al observador Cases of observer interference	4
Viajes revisados en estas reuniones Trips reviewed in these meetings	565
Lances sobre delfines revisados en estas reuniones Dolphin sets reviewed in these meetings	8,863
Lances accidentales revisados en estas reuniones Accidental sets reviewed in these meetings	3

TABLE 9. Responses for six types of possible infractions identified by the International Review Panel at its 39th and 40th meetings.

TABLA 9. Respuestas para seis tipos de posibles infracciones identificadas por el Panel Internacional de Revisión en sus reuniones 39 y 40.

	No. de casos	Sin respuesta	Respuestas						Total
			Bajo investigación ¹	No hubo infracción	Infracción: sin sanción	Infracción: aviso	Infracción: sanción ²		
	No. of cases	No response	Responses						Total
			Under investigation ¹	No infraction	Infraction: no sanction	Infraction: warning	Infraction: sanction ²		
HOSTIGAMIENTO AL OBSERVADOR – OBSERVER HARASSMENT									
COL	1	0	0	1	0	0	0	1 (100%)	
ESP	1	0	0	1	0	0	0	1 (100%)	
HND	1	0	1	0	0	0	0	1 (100%)	
VEN	1	1 (100%)	0	0	0	0	0	0 -	
Total³:	4	1 (25%)	1	2	0	0	0	3 (75%)	
USO DE EXPLOSIVOS – USE OF EXPLOSIVES									
MEX	1	0	1	0	0	0	0	1 (100%)	
NIC	1	0	1	0	0	0	0	1 (100%)	
PAN	6	0	0	6	0	0	0	6 (100%)	
VEN	2	0	2	0	0	0	0	2 (100%)	
Total:	10	0	4	6	0	0	0	10 (100%)	
LANCES NOCTURNOS – NIGHT SETS									
COL	1	0	0	1	0	0	0	1 (100%)	
PAN	3	0	2	1	0	0	0	3 (100%)	
SLV	1	1 (100%)	0	0	0	0	0	0 -	
VEN	7	4 (57%)	3	0	0	0	0	3 (43%)	
Total	12	5 (42%)	5	2	0	0	0	7 (58%)	
PESCAR SIN OBSERVADOR – FISHING WITHOUT AN OBSERVER									
<i>Ningún caso identificado durante el periodo de este informe</i>									
<i>No identified cases during this report period</i>									
PESCAR SOBRE DELFINES SIN LMD – FISHING ON DOLPHINS WITHOUT A DML									
COL	3	0	0	3	0	0	0	3 (100%)	
Total	3	0	0	3	0	0	0	3 (100%)	
LANCES SOBRE DELFINES DESPUES DE ALCANZAR EL LMD-- SETS ON DOLPHINS AFTER REACHING THE DML									
<i>Ningún caso identificado durante el periodo de este informe</i>									
<i>No identified cases during this report period</i>									

Appendix A

POSSIBLE INFRACTIONS IDENTIFIED BY THE IRP

Brief descriptions of government actions taken, as reported to the Secretariat by June 21, 2006, are included. If no action is listed for a possible infraction, the Secretariat has not received a response from the government.

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

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

Abbreviations: DSP = Dolphin Safety Panel

COLOMBIA			
<i>Vessel</i>	<i>IRP recno</i>	<i>Review date</i>	<i>Identified infractions</i>
COL 1	2005-048	2005/06	1) 1 Trip with dolphin sets before the DML notification Action taken: 1) The Government determined that there was no infraction because it was due to an administrative error by the Government.
	2005-421	2005/10	1) 1 Case of observer interference Action taken: 1) After investigating, the government did not find enough elements to follow an administrative procedure.
COL 2	2005-053	2005/10 2005/10	1) 1 Trip with captain not on the AIDCP list 2) 1 Trip with dolphin sets before the DML notification Action taken: 1) After investigating, the government decided that no infraction occurred. 2) The Government determined that there was no infraction because it was due to an administrative error by the Government.
	2005-232	2005/10	1) 1 Trip without a required high intensity floodlight Action taken: 1) After investigating, the government did not find enough elements to follow an administrative procedure.
COL 3	2004-752	2005/06	1) 1 Trip with dolphin sets before the DML notification Action taken: 1) The Government determined that there was no infraction because it was due to an administrative error by the Government.
COL 4	2004-739	2005/06	1) 1 Trip with dolphin sets but no DML assigned Action taken: 1) The government determined that in accordance with its national legislation, there was no infraction because they did assign a national DML to this vessel.
	2005-166	2005/06	1) 1 Trip with dolphin sets but no DML assigned Action taken: 1) The government determined that in accordance with its national legislation, there was no infraction because they did assign a national DML to this vessel.
	2005-415	2005/10	1) 1 Trip with dolphin sets but no DML assigned Action taken: 1) The government determined that in accordance with its national legislation, there was no infraction because they did assign a national DML to this vessel.
COL 5	2005-069	2005/06	1) 1 Trip with dolphin sets before the DML notification Action taken: 1) The Government determined that there was no infraction because it was due to an administrative error by the Government.
	2005-253	2005/10	1) 1 Night set Action taken: 1) After investigating, the government decided that no infraction occurred.
COL 6	2004-760	2005/06 2005/06	1) 1 Trip without a required high intensity floodlight 2) 1 Trip with dolphin sets before the DML notification Action taken: 1) The government is investigating the possible infractions. 2) The Government determined that there was no infraction because it was due to an administrative error by the Government.
COL 7	2005-071	2005/06	1) 1 Set with unavoids dolphin injury or mortality Action taken: 1) The government is investigating the possible infractions.

MEXICO			
<i>Vessel</i>	<i>IRP recno</i>	<i>Review date</i>	<i>Identified infractions</i>
MEX 1	2004-743	2005/06	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.
	2005-180	2005/06 2005/06	1) 1 Set without a required backdown 2) 1 Set with dolphin sack-up or brail Action taken: 1), 2) After investigating, the government decided that no infraction occurred.
MEX 2	2005-208	2005/06	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.
	2005-228	2005/06	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 3	2004-757	2005/06	1) 1 Trip with captain not on the AIDCP list Action taken: 1) The case is subject to administrative litigation.
MEX 4	2005-185	2005/06	1) 1 Set or chase with use of explosives Action taken: 1) The case is subject to administrative litigation.
NICARAGUA			
<i>Vessel</i>	<i>IRP recno</i>	<i>Review date</i>	<i>Identified infractions</i>
NIC 1	2005-099	2005/06	1) 1 Set or chase with use of explosives Action taken: 1) The government is investigating the possible infractions.
PANAMA			
<i>Vessel</i>	<i>IRP recno</i>	<i>Review date</i>	<i>Identified infractions</i>
PAN 1	2005-322	2005/10 2005/10	1) 1 Night set 2) 6 Sets or chases with use of explosives Action taken: 1), 2) After investigating, the government decided that no infraction occurred.
PAN 2	2004-753	2005/06	1) 1 Trip with dolphin sets before the DML notification Action taken: 1) The Government determined that there was no infraction because it was due to an administrative error by the Government.
PAN 3	2005-151	2005/06	1) 1 Trip without a required raft Action taken: 1) After investigating, the government decided that no infraction occurred.
PAN 4	2005-261	2005/10	1) 2 Night sets Action taken: 1) The government is investigating the possible infractions.
VENEZUELA			
<i>Vessel</i>	<i>IRP recno</i>	<i>Review date</i>	<i>Identified infractions</i>
VEN 1	2005-281	2005/10	1) 1 Case of observer interference
VEN 2	2005-065	2005/06	1) 2 Night sets Action taken: 1) The government is investigating the possible infractions.
VEN 3	2005-436	2005/10	1) 2 Night sets
VEN 4	2005-435	2005/10	1) 1 Trip without a required raft
VEN 5	2005-018	2005/06	1) 1 Night set Action taken: 1) The government is investigating the possible infractions.
VEN 6	2005-480	2005/10	1) 1 Night set
VEN 7	2005-020	2005/06	1) 2 Sets or chases with use of explosives Action taken: 1) The government is investigating the possible infractions.
VEN 8	2005-387	2005/10 2005/10	1) 1 Night set 2) 1 Trip without a required raft

OTHERS			
<i>Vessel</i>	<i>IRP recno</i>	<i>Review date</i>	<i>Identified infractions</i>
OTH1	2005-370	2005/10	1) 1 Case of observer interference Action taken: 1) After investigating, the government decided that no infraction occurred.
OTH2	2005-096	2005/06	1) 1 Case of observer interference Action taken: 1) The government is investigating the possible infractions.
OTH3	2005-023	2005/06	1) 1 Night set