

AGREEMENT ON THE INTERNATIONAL DOLPHIN CONSERVATION PROGRAM

28TH 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 Inter-American Tropical Tuna Commission (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 31 December 2012, Belize, Colombia, Costa Rica, Ecuador, El Salvador, the European Union, Guatemala, Honduras, Mexico, Nicaragua, Panama, Peru, the United States, and Venezuela have ratified or acceded to the Agreement. Bolivia and Vanuatu have expressed their intention to apply 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 AIDCP international observer program and the national observer programs of Colombia (Programa Nacional de Observadores de Colombia, PNOC), 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), Nicaragua (Programa Nacional de Observadores de Nicaragua; PRONAON, administered by the Programa Nacional de Observadores Panameños, PRONAOP); Panama (PRONAOP), and Venezuela (Programa Nacional de Observadores de Venezuela; PNOV) constitute the AIDCP On-Board Observer Program. At its 82nd meeting in July 2011, the IATTC agreed on a memorandum of cooperation with the Western and Central Pacific Fisheries Commission (WCPFC) for cross-endorsement of observers to monitor vessels that fish or transit the high-seas Convention Areas of both organizations. This memorandum replaces and enhances a previous arrangement with Forum Fisheries Agency.

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) in the Agreement Area. In 2012, the Ecuadorian program had a goal of sampling approximately one-third of the trips by its fleet, and the Colombian, European Union, Mexican, Nicaraguan, Panamanian, 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 five fleets, plus all trips by vessels of other fleets.

During 2012, AIDCP observers departed on 750 fishing trips in the Agreement Area (Table 1), which included 13 trips by vessels of less than 363 tons capacity required to carry observers during closure periods and two trips monitored by WCPFC observers. This does not include 15 additional trips with AIDCP observers on vessels that fished outside the Agreement Area. The Program covered vessels operating under the flags of Colombia, Ecuador, El Salvador, European Union (Spain), Guatemala, Honduras, Mexico, Nicaragua, Panama, the United States, Vanuatu, and Venezuela.

In 2012 the Program placed observers aboard 100% of trips by large purse-seine vessels, as required by the AIDCP, and the IATTC program monitored 58% of all trips.

2.2. Observer training

The IATTC staff conducted one observer training course for the IATTC and the national program of Ecuador (PROBECUADOR) on 3-20 September 2012 in Manta Ecuador with 19 attendees. The staffs of the IATTC and WCPFC held a training course for observers from the Kiribati national program on 17-22 August 2012 in Tarawa, Republic of Kiribati, with 16 attendees.

3. DOLPHIN MORTALITY

3.1. Dolphin Mortality Limits (DMLs)

3.1.1. 2012 DMLs

The overall dolphin mortality limit (DML) for the international fleet in 2012 was 5,000 animals, and the unreserved portion of 4,900 was allocated to 84 qualified vessels that requested DMLs. The average individual-vessel DML (ADML), based on 84 DML requests, was 58.3. A total of 75 vessels utilized their full-year DMLs. Eight vessels that did not utilize their DMLs prior to 1 April were allowed to keep them for the remainder of the year under the force majeure exemption allowed by the AIDCP. One vessel forfeited its DML by not utilizing it prior to April 1, but it was agreed at the 25th Meeting of the Parties that this vessel could receive the equivalent of a second-semester DML from another vessel of the same company. There were no second-semester DML requests. A DML of 19 from the Reserve DML Allocation was assigned to a vessel that had been inactive for several years. No vessel exceeded its DML in 2012. The distribution of the mortality caused in 2012 by vessels with DMLs is shown in Figure 1.

3.1.2. 2013 DMLs

The Parties requested and received 90 DMLs for 2013 from the unreserved portion (4,900) of the overall fleet mortality limit. The ADML is 54.4. Five vessels renounced their DMLs. Six vessels that did not utilize their DMLs prior to 1 April were allowed to keep their DMLs for the remainder of the year under the *force majeure* exemption allowed by the AIDCP. There were no second-semester DML requests, and as of 17 September no requests for a Reserve DML Allocation have been received.

3.2. Estimates of the mortality of dolphins in 2012 due to fishing

The estimate of the incidental mortality of dolphins in the fishery in 2012 is 870 animals (Table 2), an 11.8% decrease over the 986 mortalities recorded in 2011. The mortalities for 1979-2012, 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 since the early 1990s (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 number of sets on dolphin-associated schools of tuna made by vessels over 363 t decreased by 4%, from 9,604 in 2011 to 9,220 in 2012, and this type of set accounted for 42% of the total number of sets made in 2012, compared to 44% in 2011. The average mortality per set was 0.094 dolphins in 2012 and 0.10 dolphins in 2011. 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 3% in 2012, as compared to 2011. The percentage of the catch of yellowfin taken in sets on dolphins increased from 68% of the total catch in 2011 to 71% of the catch in 2012, and the average catch of yellowfin per set on dolphins increased from 14.2 to 15.0 metric tons. The mortality of dolphins per metric ton of yellowfin caught decreased from 0.0072 in 2011 to 0.0063 in 2012.

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 without mortalities, which has risen from 38% in 1986 to 94.5% in 2012, and the average number of animals left in the net after backdown, which has decreased from 6.0 in 1986 to 0.1 or less since 2001 (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 1998-2012; 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 2012, the reporting rate averaged 99% (Table 6), an improvement of 2% compared to 2011.

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 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 2012, the IRP consisted of 20 members: 16 governmental and 4 representatives of non-governmental organizations (instead of the normal 6, due to lack of candidates), 2 from non-governmental environmental organizations and 2 from the tuna industry.

The IRP held two meetings during 2012 in La Jolla, California (USA), on 18 June and 22 October. The IRP also met in La Jolla on 3 June 2013.

The minutes of IRP meetings are available on the [IATTC website](#), along with the other documents posted for each set of meetings. 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 fishing in the Agreement Area that began in 2012 with an IDCP observer aboard were issued TTFs.

6. AMENDMENTS AND RESOLUTIONS AFFECTING THE OPERATION OF THE IDCP

For 2012, the Parties maintained Resolution A-09-01 on vessel assessments and financing for the On-Board Observer Program, but agreed that all vessels, active and inactive, would make an exceptional contribution, for 2013 only, of US\$ 1.00 per cubic meter (m³) of well volume, with the commitment by the Parties that at their meeting in 2013 the budget would be reengineered with the objective of limiting costs to the funds available.

7. OTHER FUNCTIONS PERFORMED BY THE SECRETARIAT

7.1. Dolphin safety panel alignments

During 2012, the IATTC staff conducted 11 alignments of dolphin-safety panels (DSP) and inspections of dolphin rescue gear aboard two vessels registered in Mexico. 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 cap-

tain 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. At the request of the national authorities of Mexico, staff members of the Programa Nacional para el Aprovechamiento del Atún y Protección de los Delfines (PNAAPD) of Mexico participated in 10 of these alignments with the IATTC staff, with the goal to be trained on these procedures. After the PNAAPD staff gained sufficient experience to do alignments on their own, three more net alignments were performed without the participation of the IATTC staff, for a total of 14 alignments during the year.

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 2012, seven training seminars were held, which were attended by 73 fishermen.

Date	Program	Location	Attendees
1-Jan	PNOV (Venezuela)	Panama, Panama	7
9-Jan	PNOV (Venezuela)	Panama, Panama	6
16-Jan	PNAAPD (Mexico)	Mazatlan, Mexico	6
17-Aug	PNOV (Venezuela)	Cumana, Venezuela	6
26-Sep	IATTC	Manta, Ecuador	10
27-Nov	NMFS (USA)	Long Beach, USA	3
7-Dec	PNAAPD (Mexico)	Ensenada, Mexico	35

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. This statement 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 2012, statements of the first type were issued for 121 fishing trips by vessels of Colombia, Ecuador, El Salvador, Guatemala, Mexico, Nicaragua, Panama, Vanuatu, and Venezuela.

8. RESEARCH

Figures 4-6 compare the spatial distributions of fishing effort in the Agreement Area by vessels carrying observers, in numbers of sets, by type, in 2011 and 2012. The patterns of dolphin sets and floating-object sets were largely similar in both years. For unassociated sets, a far-western concentration of sets in the far west of the Agreement Area was observed in 2012 but not in 2011.

Professor André Punt, Director of the School of Aquatic and Fishery Sciences, University of Washington was contracted to provide an independent review of the EPO dolphin population assessments. He con-

cluded

1. The types of models applied to eastern Pacific Ocean dolphin stocks are appropriate (and consistent with those used for stock assessments of other marine mammals). However, there has been no systematic evaluation of the basis for the assumptions underlying those assessments, and the sensitivity tests conducted (although fairly thorough) are not particularly closely linked to the hypotheses raised for the apparent lack of recovery of these stocks.
2. If an estimate of trend is required, the most straightforward approach would be to fit a log-linear model to the most-recent few abundance estimates.
3. A workshop should be conducted to identify (a) a broad set of hypotheses regarding the dynamics of these dolphin stocks, (b) a set of mathematical models which can (to the extent possible) represent them, and (c) what data are available to parameterize the models. A second workshop should be conducted to review the resulting assessment within a framework in which additional analyses can be requested by a Review Panel.

MORTALITY CAUSED BY DML VESSELS - 2012
MORTALIDAD CAUSADA POR BARCOS CON LMD - 2012

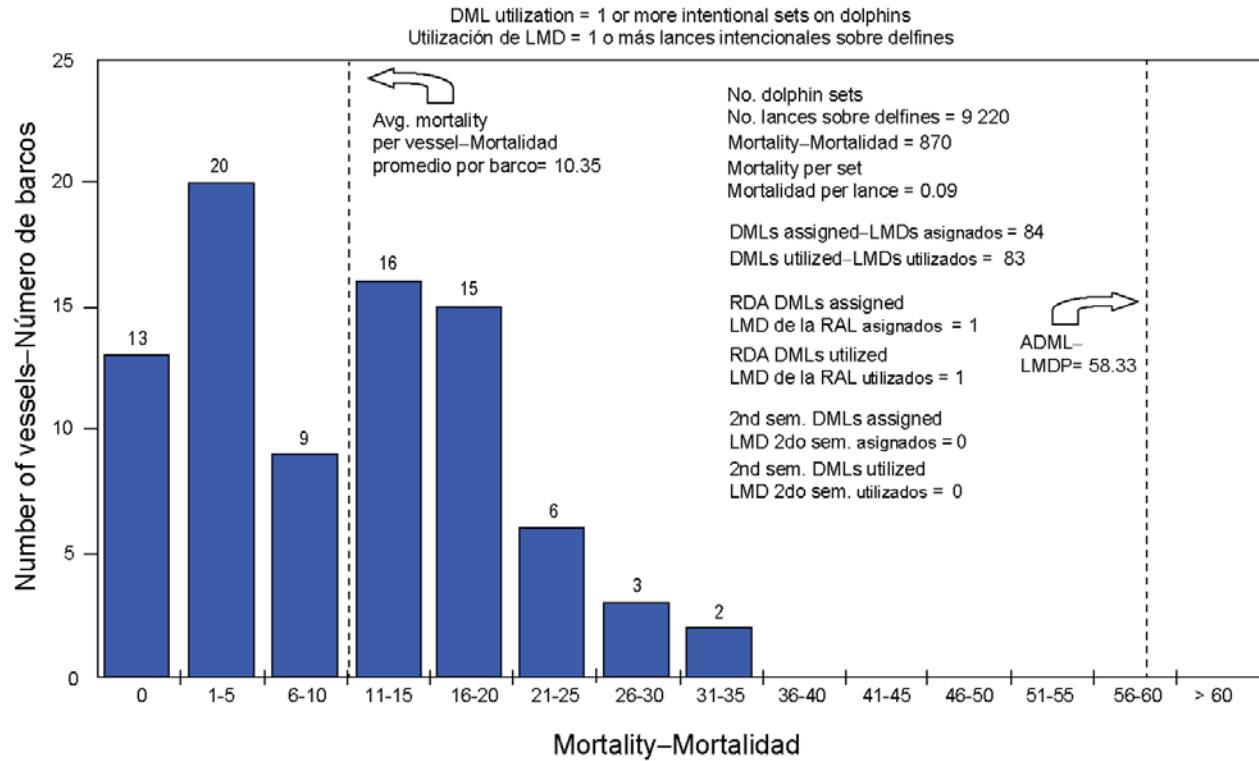


FIGURE 1. Distribution of dolphin mortality caused by vessels with DMLs during 2012.
FIGURA 1. Distribución de la mortalidad de delfines causada por buques con LMD durante 2012.

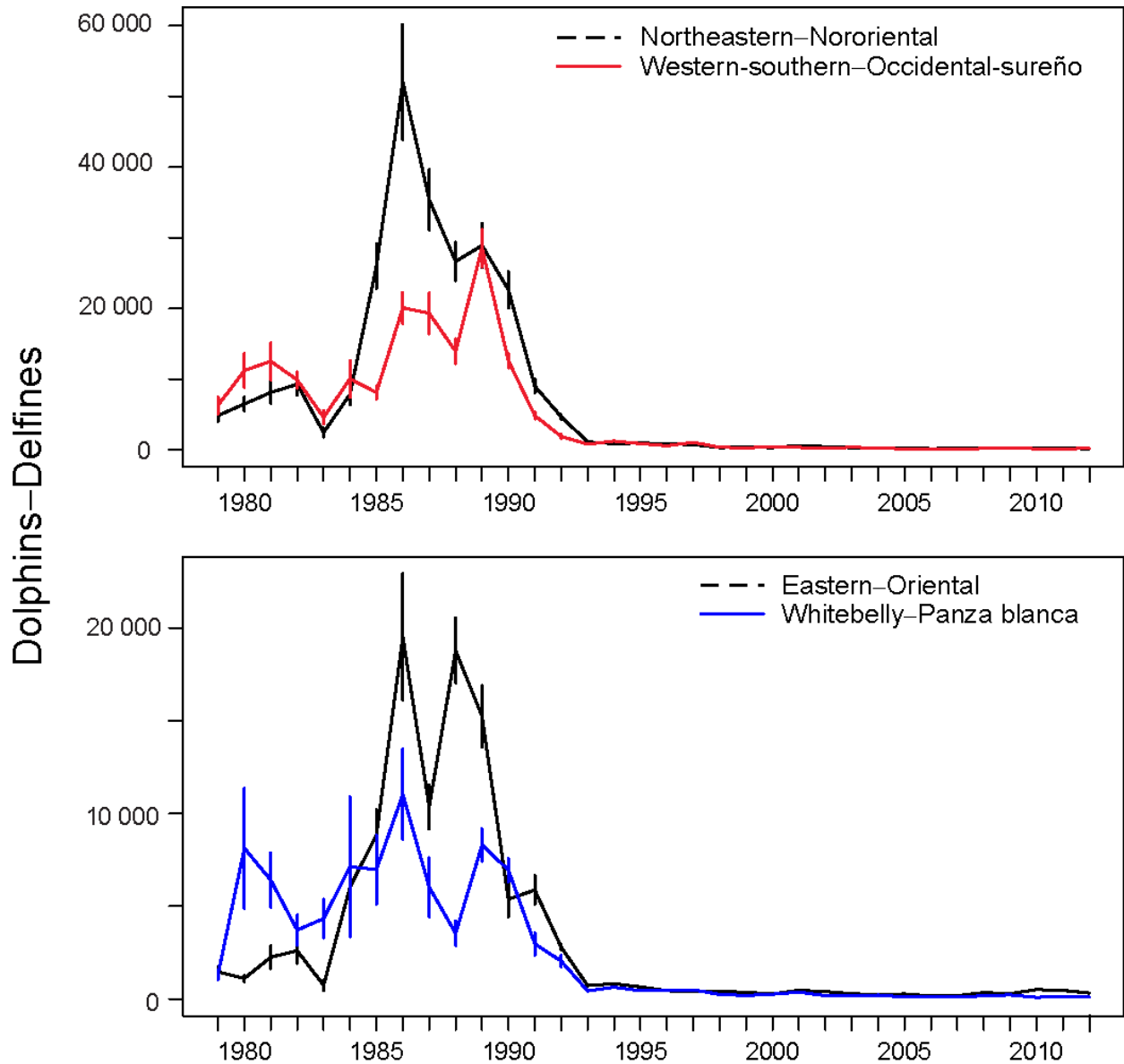


FIGURE 2. Estimated mortalities for the stocks of spotted (upper panel) and spinner (lower panel) dolphins in the eastern Pacific Ocean, 1979-2012. Each vertical line represents one positive and one negative standard error.

FIGURA 2. Mortalidad estimada de las poblaciones de delfines manchados (panel superior) y tornillo (panel inferior) en el Océano Pacífico oriental, 1979-2012. Cada línea vertical representa un error estándar positivo y un error estándar negativo.

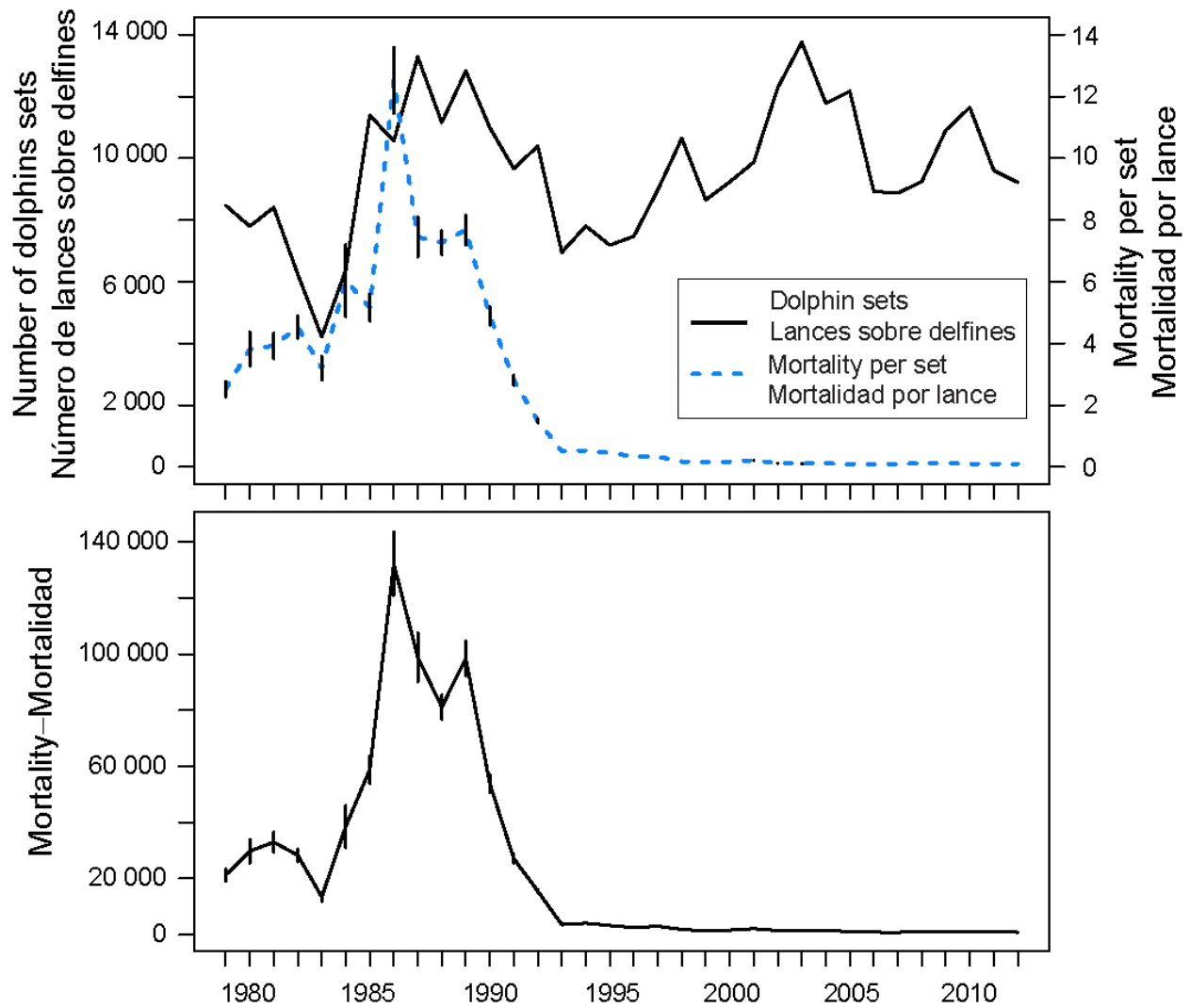


FIGURE 3. Total number of dolphin sets and average mortality per set (upper panel) and estimated total mortality (lower panel) for all dolphins in the EPO, 1979-2012. Each vertical line represents one positive and one negative standard error.

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, 1979-2012. Cada línea vertical representa un error estándar positivo y un error estándar negativo.

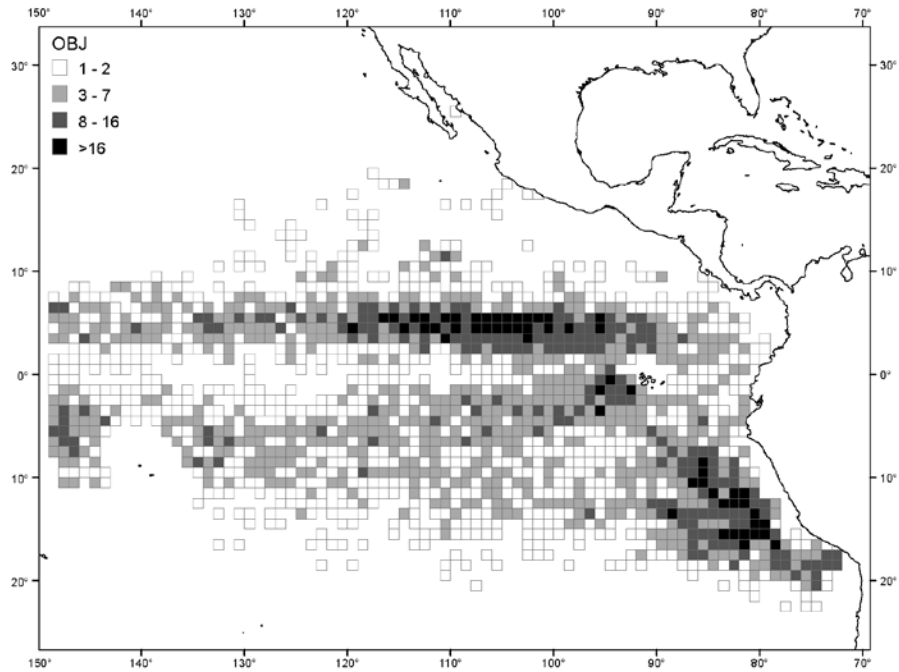


FIGURE 4a. Spatial distribution of sets on tuna associated with floating objects in the Agreement Area, 2011.

FIGURA 4a. Distribución espacial de los lances sobre atunes asociados con objetos flotantes en el Area del Acuerdo, 2011.

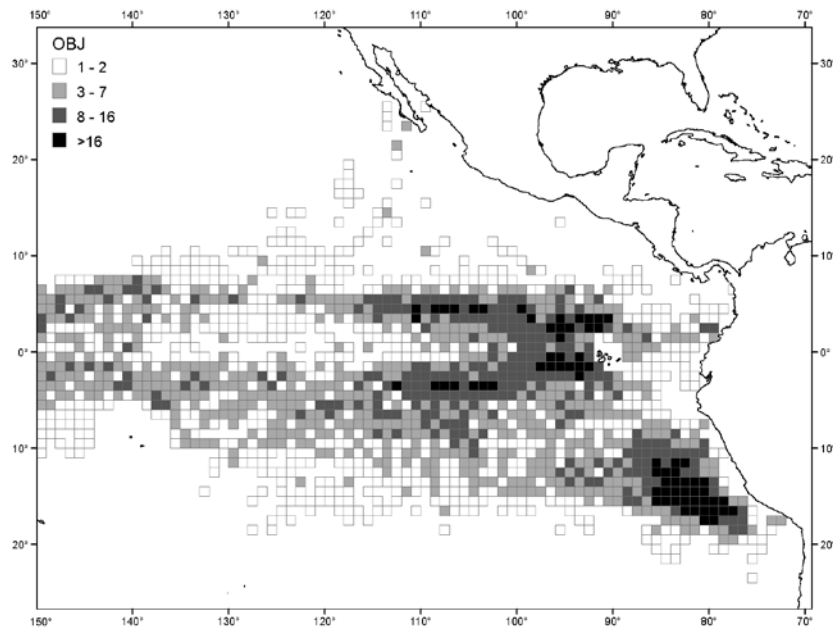


FIGURE 4b. Spatial distribution of sets on tuna associated with floating objects in the Agreement Area, 2012.

FIGURA 4b. Distribución espacial de los lances sobre atunes asociados con objetos flotantes en el Area del Acuerdo, 2012.

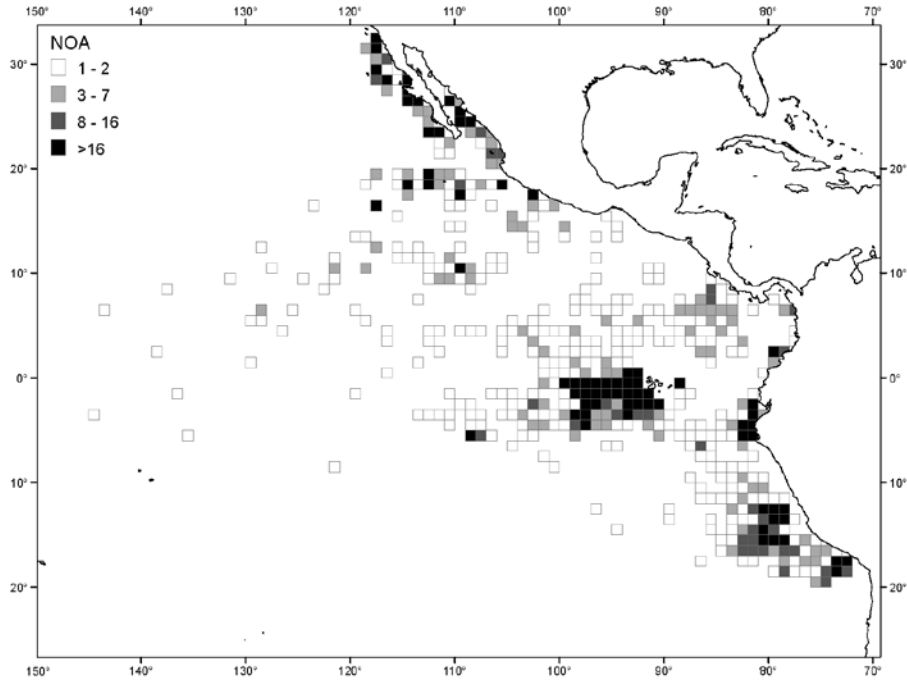


FIGURE 5a. Spatial distribution of sets on unassociated schools of tunas in the Agreement Area, 2011.
FIGURA 5a. Distribución espacial de lances sobre cardúmenes de atunes no asociados en el Area del Acuerdo, 2011.

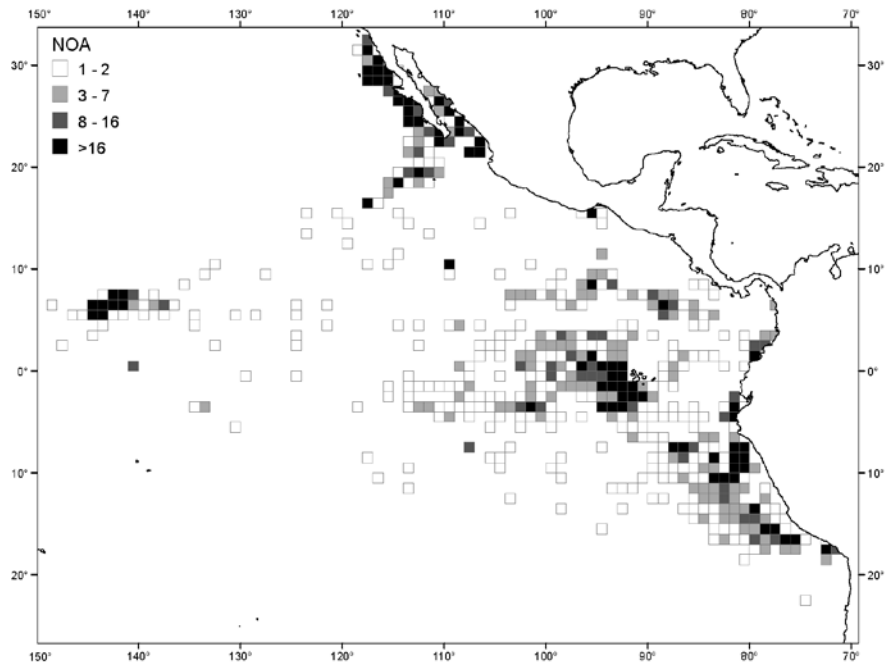


FIGURE 5b. Spatial distribution of sets on unassociated schools of tunas in the Agreement Area, 2012.
FIGURA 5b. Distribución espacial de lances sobre cardúmenes de atunes no asociados en el Area del Acuerdo, 2012.

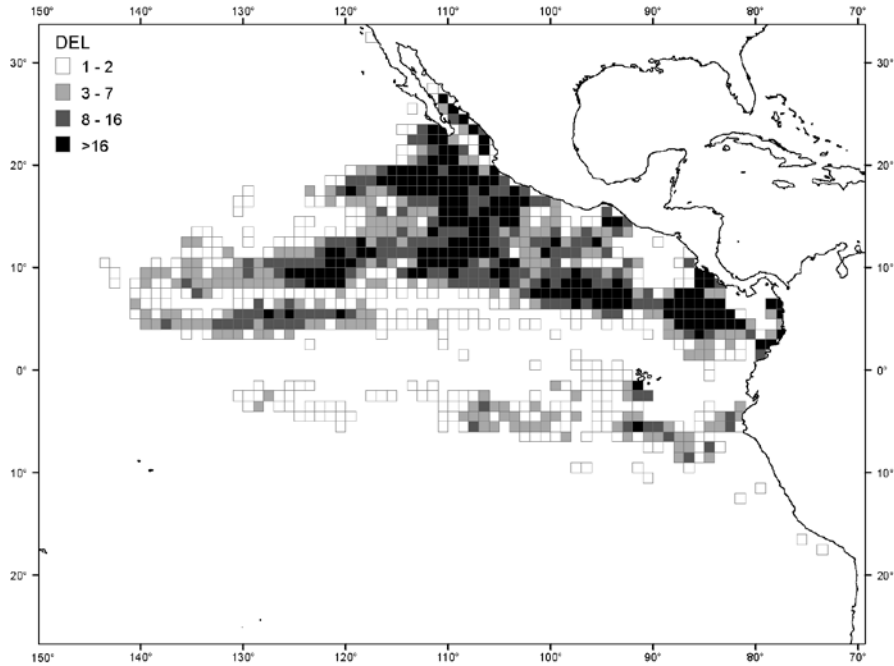


FIGURE 6a. Spatial distribution of sets on tuna associated with dolphins in the Agreement Area, 2011.

FIGURA 6a. Distribución espacial de los lances sobre atunes asociados con delfines en el Area del Acuerdo, 2011.

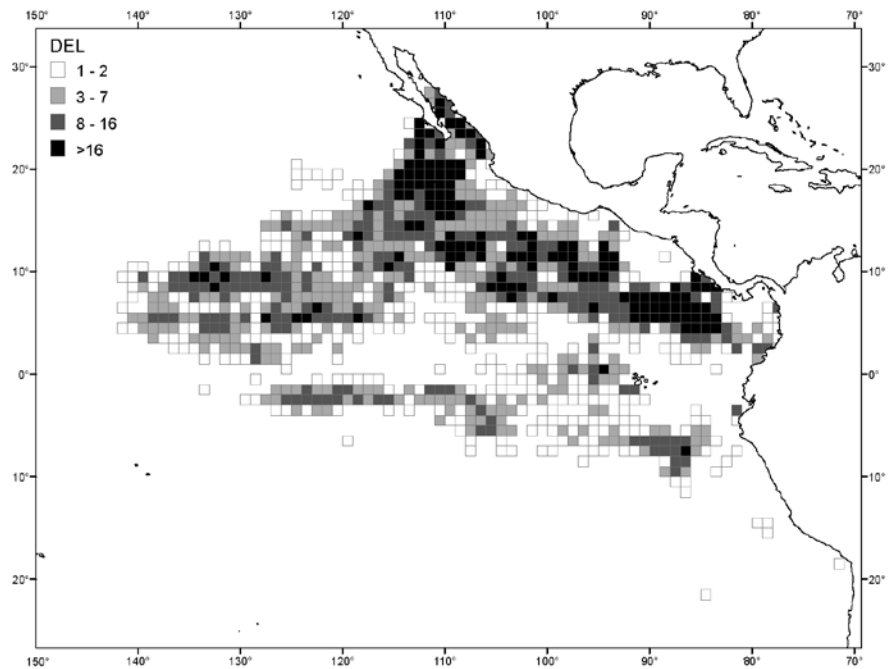


FIGURE 6b. Spatial distribution of sets on tuna associated with dolphins in the Agreement Area, 2012.

FIGURA 6b. Distribución espacial de los lances sobre atunes asociados con delfines en el Area del Acuerdo, 2012.

TABLE 1. Coverage by the On-Board Observer Program of trips initiated during 2012.

TABLA 1. Cobertura por el Programa de Observadores a Bordo de viajes iniciados durante 2012.

Buques de clase 6, por programa					
Flota nacional			Nacional	CIAT	% observado
Class-6 vessels, by program					
National fleet		Trips	National	IATTC	% observed
Colombia	COL	42	21	21	100
Ecuador	ECU	297	107 ¹	190	100
EU-UE (España – Spain)	ESP	19	9 ¹	10	100
Guatemala	GTM	7	0	7	100
México	MEX	205	97	108	100
Nicaragua	NIC	22	11	11	100
Panamá	PAN	61	32	29	100
Perú	PER	1	0	1	100
El Salvador	SLV	15	0	15	100
EE.UU. – USA	USA	3	1	2	100
Venezuela	VEN	62	32	30	100
Vanuatu	VUT	3	0	3	100
Subtotal		737	310	427	100
Buques de clase 4, por programa					
Flota nacional			Nacional	CIAT	% observado
Class-4 vessels, by program					
National fleet		Trips	National	IATTC	% observed
Ecuador	ECU	13	7	6	- ²
Total		750	317	433	100

¹ Includes one trip accompanied by a WCPFC observer

¹ Incluye un viaje acompañado por un observador de la WCPFC

² The AIDCP does not require class-4 vessels to be sampled at 100%

² El APICD no requiere un 100% de cobertura de los buques de clase 4

TABLE 2. Estimates of mortalities of dolphins in 2012, population abundance, and relative mortality, by stock.

TABLA 2. Estimaciones de la mortalidad incidental de delfines en 2012, la abundancia de las poblaciones, y la mortalidad relativa, por población.

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	151	911,177	0.02
Western/southern—Occidental y sureño	187	911,830	0.02
Spinner dolphin—Delfín tornillo ¹			
Eastern—Oriental	324	790,613	0.04
Whitebelly—Panza blanca	107	711,883	0.02
Common dolphin—Delfín común ²			
Northern—Norteño	49	449,462	0.01
Central	4	577,048	<0.01
Southern—Sureño	30	1,525,207	<0.01
Other dolphins—Otros delfines ³	18		
Total	870		

¹ Logistic model for 1986-2006 (IATTC SAB-07-05);

¹ Modelo logístico para 1986-2006 (CIAT SAB-07-05)

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 "Other dolphins" includes the following species and stocks, whose observed mortalities were as follows: Central American spinner dolphin (*Stenella longirostris centroamericana*) 6; bottlenose dolphins (*Tursiops truncatus*) 2; and unidentified dolphins, 10.

³ "Otros delfines" incluye las siguientes especies y poblaciones, con las mortalidades observadas correspondientes: delfin tornillo centroamericano (*Stenella longirostris centroamericana*), 6; tonina (*Tursiops truncatus*), 2; y delfines no identificados, 10.

TABLE 3. Annual estimates of dolphin mortality, by species and stock, 1979-2012. The estimates for 1979-1992 are based on a mortality-per-set ratio. The mortalities for 1993-2011 represent the sums of the observed species and stock tallies recorded by the IATTC and national programs. Mortalities for 2001-2003 have been adjusted for unobserved trips of vessels over 363 t carrying capacity.

TABLA 3. Estimaciones anuales de la mortalidad de delfines, por especie y población, 1979-2012. Las estimaciones de 1979-1992 se basan en una razón de mortalidad por lance. Las mortalidades de 1993-2011 son las sumas de las mortalidades por especie y población registradas por los programas de la CIAT y nacionales. La mortalidad de 2001-2003 fue ajustada para viajes no observados de buques de más de 363 t de capacidad de acarreo.

	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	1,112	773	725	437	139	230	0	185	3,601
1994	847	1,228	828	640	85	170	0	298	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	100	1,876
1999	358	253	363	192	85	34	1	62	1,348
2000	295	435	275	262	54	223	10	82	1,636
2001	592	315	470	374	94	205	46	44	2,140
2002	435	203	403	182	69	155	3	49	1,499
2003	288	335	290	170	133	140	97	39	1,492
2004	261	256	223	214	156	97	225	37	1,469
2005	273	100	275	108	114	57	154	70	1,151
2006	147	135	160	144	129	86	40	45	886
2007	189	116	175	113	55	69	95	26	838
2008	184	167	349	171	104	14	137	43	1,169
2009	266	254	288	222	109	30	49	21	1,239
2010	170	135	510	92	124	116	8	15	1,170
2011	172	124	467	139	35	12	9	28	986
2012	151	187	324	107	49	4	30	18	870

¹Estimates for offshore spotted dolphins include mortalities of coastal spotted dolphins.

¹Las 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 2004-2012, 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 se cuenta con errores estándar para 1995-2000 y 2004-2012, 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
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. 1986-2008 data are from trips observed by the IATTC program only; data after 2008 includes trips covered by national programs.

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. Los datos de 1986-2008 provienen de viajes observados por el programa de la CIAT solamente; los datos posteriores a 2008 incluyen viajes observados por los programas nacionales.

	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
2006	93.9	5.7	3.3	3.5	15.8	<0.1
2007	94.2	5.1	1.6	3.4	15.2	<0.1
2008	92.4	4.9	2.9	3.7	16.1	0.1
2009	93.3	5.2	1.8	3.1	16.7	<0.1
2010	94.1	4.7	1.3	2.4	16.2	<0.1
2011	94.0	4.1	1.9	2.1	16.3	<0.1
2012	94.5	4.3	1.9	1.5	16.5	<0.1

TABLE 6. Weekly reports of dolphin mortality received, 2012.**TABLA 6.** Informes semanales de mortalidad de delfines recibidos, 2012.

	Programa	Semanas	Informes			Programa	Semanas	Informes		
	Program	Weeks	Reports	%		Program	Weeks	Reports	%	
COL	CIAT	222	220	99		NIC	CIAT	95	89	94
	PRODELCO	191	191	100			PRONAOP	97	97	100
ECU	CIAT	1,282	1,282	100		PAN	CIAT	198	198	100
	PNE	697	681	98			PRONAOP	215	215	100
	PRONAOP	16	16	100		PER	IATTC	4	4	100
UE (ESP)	CIAT	47	47	100		SLV	CIAT	110	110	100
	PNOT	61	61	100		USA	CIAT	13	3	100
GTM	CIAT	53	53	100		VEN	CIAT	219	218	100
MEX	CIAT	659	642	97			PNOV	239	239	100
	PNAAPD	619	619	100		VUT	CIAT	19	18	95
Total								5,056	5,013	99

TABLE 7. Preliminary reports of the mortalities of dolphins in 2013, to 8 September.**TABLA 7.** Informes preliminares de las mortalidades de delfines en 2013, hasta el 8 de septiembre.

Species and stock	Total mortality	Limit	Used (%)
Especie y población	Mortalidad total	Límite	Usado (%)
Offshore spotted dolphin – Delfín manchado de altamar			
Northeastern--Nororiental	138	793	17.4
Western-southern--Occidental-sureño	108	881	12.3
Spinner dolphin – Delfín tornillo			
Eastern--Oriental	212	655	32.4
Whitebelly--Panza blanca	81	666	12.2
Common dolphin – Delfín común			
Northern--Norteño	63	562	11.2
Central	0	207	0.0
Southern--Sureño	8	1,845	0.4
Others and unidentified--Otros y no identificados	9		
Total	619	5,000	12.4

TABLE 8. Summary of possible infractions identified by the International Review Panel at its 51st and 52nd meetings, June and October 2012.

TABLA 8. Resumen de posibles infracciones identificadas por el Panel Internacional de Revisión en su 51^a and 52^a reuniones, junio y octubre de 2012.

INFRACCIONES MAYORES / MAJOR INFRACTIONS:	
Viaje sin observador Trips without an observer	2
Viajes con lances en delfines sin LMD asignado Trips with dolphin sets but no DML assigned	0
Viajes con capitanes no incluidos en la lista del APICD Trips with captains not on the AIDCP list	0
Viajes sin paño de protección de delfines Trips without a dolphin safety panel	1
Lances intencionales después de alcanzar el LMD Intentional sets made after reaching the DML	0
Lances o cazas con uso de explosivos Sets or chases with use of explosives	0
Lances sobre stocks o tipos de manadas prohibidas Sets on banned stocks or school types	0
Lances sin retroceso Sets without a required backdown	0
Lances con embolsamiento o salabardeo de delfines Sets with dolphin sack-up or brail	0
Lances sin evitar herir o matar delfines Sets with unavoided dolphin injury or mortality	0
Total	3
OTRAS INFRACCIONES / OTHER INFRACTIONS:	
Viajes sin balsa Trips without a required raft	5
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	2
Viajes sin máscaras de buceo Trips without required facemasks	0
Lances nocturnos (ocurrieron en dos viajes) Night sets (occurred in two trips)	0
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	2
Total	9
Casos de interferencia al observador Cases of observer interference	4
Viajes revisados en estas reuniones Trips reviewed in these meetings	750
Lances sobre delfines revisados en estas reuniones Dolphin sets reviewed in these meetings	9362
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 51st and 52nd meetings.

TABLA 9. Respuestas para seis tipos de posibles infracciones identificadas por el Panel Internacional de Revisión en su 51^a y 52^a reuniones.

	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	1 (100%)	0	0	0	0	0	0	
ECU	1	1 (100%)	0	0	0	0	0	0	
PAN	1	-	0	1	0	0	0	1 (100%)	
USA	1	0	1	0	0	0	0	1 (100%)	
Total:	4	2 (50%)	1	1	0	0	0	2 (50%)	
USO DE EXPLOSIVOS – USE OF EXPLOSIVES									
<i>Ningún caso identificado durante el periodo de este informe</i>									
<i>No identified cases during this report period</i>									
LANCES NOCTURNOS – NIGHT SETS									
<i>Ningún caso identificado durante el periodo de este informe</i>									
<i>No identified cases during this report period</i>									
PESCAR SIN OBSERVADOR – FISHING WITHOUT AN OBSERVER									
MEX	2	0	-	2	0	0	0	0	2 (100%)
Total:	2	0	-	2	0	0	0	0	2 (100%)
PESCAR SOBRE DELFINES SIN LMD – FISHING ON DOLPHINS WITHOUT A DML									
<i>Ningún caso identificado durante el periodo de este informe</i>									
<i>No identified cases during this report period</i>									
LANCES SOBRE DELFINES DESPUES DE ALCANZAR EL LMD-- SETS ON DOLPHINS AFTER REACHING 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 September 16, 2013, 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 (Guatemala, Peru, 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	2011-609	2012/06	1) 1 Case of observer interference
ECUADOR			
<i>Vessel</i>	<i>IRP recno</i>	<i>Review date</i>	<i>Identified infractions</i>
ECU 1	2012-435	2012/10	1) 1 Case of observer interference
MEXICO			
<i>Vessel</i>	<i>IRP recno</i>	<i>Review date</i>	<i>Identified infractions</i>
MEX 1	2012-491	2012/10 2012/10	1) 1 Trip without an observer 2) 1 Trip without a required raft Action taken: 1) The government initiated the proper administrative process to investigate the possible infractions. 2) After investigating, the government decided that no infraction occurred, but issued a warning to the vessel owner to obtain the required equipment.
MEX 2	2012-453	2012/10	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	2012-497	2012/10	1) 1 Trip without an observer Action taken: 1) The government initiated the proper administrative process to investigate the possible infractions.
MEX 4	2012-132	2012/06	1) 1 Trip without a required high intensity floodlight
NICARAGUA			
<i>Vessel</i>	<i>IRP recno</i>	<i>Review date</i>	<i>Identified infractions</i>
NIC 1	2011-734	2012/06	1) 1 Trip with dolphin sets before the DML notification Action taken: 1) The government indicated that no infraction occurred.
NIC 2	2011-774	2012/06	1) 1 Trip with dolphin sets before the DML notification Action taken: 1) The government indicated that no infraction occurred.
PANAMA			
<i>Vessel</i>	<i>IRP recno</i>	<i>Review date</i>	<i>Identified infractions</i>
PAN 1	2012-351	2012/10	1) 1 Case of observer interference Action taken: 1) The government decided that no infraction occurred.
PAN 2	2011-760	2012/06	1) 1 Trip without a required raft
PAN 3	2012-106	2012/06 2012/06	1) 1 Trip without a dolphin safety panel 2) 1 Trip without a required raft
EL SALVADOR			
<i>Vessel</i>	<i>IRP recno</i>	<i>Review date</i>	<i>Identified infractions</i>
SLV 1	2011-771	2012/06	1) 1 Trip without a required raft Action taken: 1) After investigating, the government decided that no infraction occurred.
	2012-138	2012/10	1) 1 Trip without a required raft
OTHERS			
<i>Vessel</i>	<i>IRP recno</i>	<i>Review date</i>	<i>Identified infractions</i>
OTH 1	2011-485	2012/06	1) 1 Case of observer interference Action taken: 1) The government is investigating the possible infractions.