

Supplement BL2003 – 2003 Revised On-board Boat Location Form

Introduction

Samplers may ride the party or charter boats (Commercial Passenger Fishing Vessels – CPFV's) in order to interview anglers. Since we may ride the party boats, there is an opportunity to collect detailed information about all locations fished. The data collected is a substitute for the location of majority of harvest collected on the angler interview. This study has been conducted since 1999.

Since most party and charter boats maintain an array of electronics on-board, we have the ability to collect information such as bottom depth, exact geographic coordinates and surface temperature with the captain's permission. We may also carry onboard our own GPS receiver (with the captain's permission). We also have the chance to collect species composition and pinniped interaction for each fishing stop the boat makes.

On-board Boat Location

Each "stop" the boat makes where the anglers are allowed to drop their lines into the water can be a separate fishing location. When the boat is not anchored and the anglers drop their lines, the location is termed a "drift" if the engine(s) (running or not) are not engaged into gear to provide power. As the boat drifts along anglers continue to fish the "drift" and cover an area over the bottom dependent on currents and wind. Once the anglers are told by the captain or crew to pull up their lines the "drift" ends when all anglers have their gear out of the water.

Sometimes the boat will reposition or "station" over a productive fishing location. In this case, the anglers may or may not pull up their gear and the boat may be under power (gears engaged) in order to maintain or slowly move into a favorable location. In these cases, only one location need be applied to the fishing, even if the anglers needed to pull in their lines temporarily while the boat moved (usually relatively slowly) back into position. Often this "re-location" event is announced to the passengers in advance.

Since a fishing location may be a drift or troll with starting and ending points, two locations need to be recorded, one for when the anglers put their "lines down" and a second for when they pull their "lines up". Each starting and ending location will have a set of geographic coordinates and a time (in 24-hour format) in order to map the extent of travel over the bottom and calculate direction and average speed. If the drift was only a very short distance and time (less than three minutes or 300 feet) then the ending location geographic coordinates need not be recorded. However, the ending time should always be recorded so that catch per unit of effort can be calculated.

Often the captain will be "prospecting" for fish when he asks the anglers to drop their lines into the water because there is some evidence of fish on the electronics. This may result in very short unproductive stops. Record these locations since all

fishing time will be used in the calculation of catch per unit of effort. There is biological interest in locations where fish are unavailable or not cacheable.

On-board Pinniped Observations

For each fishing location, the interviewer will be checking for angler interactions with seals or sea lions. The interviewer will observe the presence of seals or sea lions, keep a tally of lost bait, sportfish and gear for each location, and record when the boat leaves the location due to the presence of seals or sea lions. The interviewer may need to work with the captain or crew to determine the reason for leaving the location when pinnipeds are present.

Species for Fishing Locations

For each fishing location the interviewer will be keeping a tally of species caught and kept or returned for that location. The tally need not be a count of all angler catches since it is often difficult to be everywhere on the boat at once. The interviewer may approximate the number of fish caught, but must record the number of anglers being observed for catch kept or returned at a location. For returned fish the number will be an approximate number most frequently.

When the catch rates are very high, the interviewer may find it necessary to monitor fewer anglers for the catch tally. It is acceptable to monitor different numbers of anglers at each location, however the preference is to monitor the same number of anglers throughout the trip. When observing fewer than the total anglers on the boat, the interviewer should vary the group of anglers by position on the boat and by composition of individual anglers. This is required so that the sample you take is random with respect to the position on the boat (stern vs. bow) and the skill of the anglers.

Conduct of this Study

This study is similar in some ways to previous studies carried out by CDFG's Central California Marine Sport Fish Project in Monterey (Reilly, P. N. et. al. Onboard Sampling of the Rockfish and Lingcod Commercial Passenger Fishing Vessel Industry in Northern and Central California [vars. eds. 1987-1995]). These on-board studies go a step beyond traditional access point surveys like the angler interview by going with anglers on their fishing trips. There is one form with additional sheets used in this study.

Biased Sampling Conduct

Many potential biases are avoided by going with the angler while some new potential biases are created. Problems with bad reporting and recall of data by the anglers is avoided but the behavior of the anglers and crew may be altered by the presence of the sampler. For example, the sampler may be perceived as an enforcement officer when dressed in a uniform. Some difficulties arise in the design of questionnaires, coding forms and sampling procedures as the number of anglers in the group increases beyond a reasonable number which can be monitored by one interviewer.

In other studies, interviewers have worked to sample a subset of anglers on the boat at random. This becomes harder with an increase in the number of anglers and their mobility on the fishing platform. With current traditional bottom fishing trips on boats with up to about 20-30 anglers, the anglers do not move about the platform much. In surface fisheries, such as tuna trips and on large boats with many more anglers, the mobility of individual anglers increases greatly. If an inexperienced interviewer decides to save effort by sampling a subset of immobile anglers in one area of the boat, for example, the results would be statistically unsound due to improper sample selection. Contact your supervisor if there is any question about how to collect fish tallies from fewer than the total number of anglers on the boat.

Use of the Form Set

There are two forms used in this study, a primary one for the locations and species tallies and an additional form for when the number of locations or species exceeds the capacity of the form. There may be two form sets with differing capacities. The current design includes a form with room for 14 locations and 12 species (7 locations on each side of the form) and another form set with 10 locations and 9 species (5 locations on each side of the form). Your supervisor will issue you the appropriate form for the fisheries in your area. For trips that use the additional sheet the sampler will code the location number or species numbers for those observations beyond the capacity of the primary form. Information from the top of the additional sheet will be used to link the data with the primary sheet and the angler interviews and any other data collected on that trip.

Item by Item Instructions – 2003 Revised On-Board Sampling Form

In this case, the item by item instructions have no item numbers printed on the form. The order followed will be sections with element numbers for reference. The location form is in two main sections, assignment data and location records:

- 1) Boat assignment data (top left of form)
- 2) Trip location data (top right rows)
- 3) Species tally data (bottom rows)

Trip Location Data

Boat Assignment Data	Assign	Stops:	Spp:	STOP#	1	2	3	4	5				
	Sampler=				START	Lat							
	Date				Lon 1								
	Boat #				Time								
	=Boat				END	Lat							
	Cnty=				Lon 1								
	Site / Lndg=				Time		Gfnt		Gfnt				
	Elg.Angs				Depths								
	Trip Type=				Temps								
	Area				ObsAng		Flyp		Flyp				
Pinniped Data	Area: 1=US-3mi, 2=US-3mi-Mexico Flyp: 1=Dist 2=Stat 3=Anchor, 4=Trot Gfnt: 1=deg,min 3=deg,min,sec 4=deg Trip Type: 1=sun/1/2, 2=pm/1/2, 3=mid/1/2, 4=twilight, 5=3/4-1day, 6=overnight, 7=other				1=Yes 2=No	Seal	Movd	Seal	Movd	Seal	Movd	Seal	Movd
	Gear	Time	Bak	Fish		G	T	G	T	G	T	G	T
	Log					B	F	B	F	B	F	B	F
	KEPT												
Species Tally Data	1												
	2												
	3												
	4												

1) Boat Assignment Data

Sheet		of	
Assign	Stops:	Spp:	
Sampler=			
Date			
Boat #			
=Boat			
Cnty=			
Site / Lndg=			
Elg.Angs			
Trip Type=			
Area			
=Capt			

There are 16 assignment data items, which are used both to link the data to the regular MRFSS interviews and to provide some unique information about the CPFV trip. The name of the boat, landing and captain name should be clearly printed for data entry. All of these items are required to be completed for the form to be acceptable.

Sheet of - This is used to indicate additional sheets.

Assignment - This is the same as on the Interview Form.

Stops Species - This is used to indicate the total number of stops and species coded on the form(s).

Sampler Code - This is the same as on the Interview Form.

Sampler Name - Print your name to the right of your code.

Date - This is the same as on the Interview Form (YYYYMMDD).

Boat # – CDFG registered number of the boat (permit number).

Boat Name – Name of the boat.

FIPS County Code - This is the same as on the Interview Form.

County – Name of the County in above item.

Site Code - This is the same as on the Interview Form.

Landing – Name of the charter office or “landing” who booked the trip.

Eligible Anglers on Boat – Number of anglers who would qualify for an MRFSS interview. This excludes working crewmembers (commercial fishermen) and passengers who did not intend to fish.

Trip Type – The trip type is based on the time of day and duration.

- 1=am1/2 – Morning half day trip
- 2=pm1/2 – Afternoon half day trip
- 3=mid1/2 – Middle of the day half day trip
- 4=twilight – Evening trip
- 5=3/4-1day – Three fourths to full day trips
- 6=overnight – Trips that comes back the next day
- 7=other – Other types of trips

Area – Distance from shore or Mexican waters..

- 1=US<3mi – Trips within 3 miles of a shore in US waters
- 2=US>3mi – Trips beyond 3 miles of a shore in US waters
- M=Mexico – Trips to Mexican waters.

Captain – Name of the charter boat captain of the trip.

2) Trip Location Data

There are 19 items for each location record. There are columns of location records on right side of the form on both sides of the sheet. Each fishing stop (with “lines down”) will have a location record completed. Not all of the items are required at each stop. Some items may be coded with all nines (i.e. “99” or “999” etc.) for “refused” or with nines with a trailing eight (i.e. “98” or “998” etc.) for “don’t know”.

If additional records are required use the additional sheet provided, writing in Item 1; “1st of 2” on the first form and “2nd of 2” on the second form. The assignment

data must be the same on both forms. Number the location records along the left side of the additional sheet as needed.

Unknown Items

The only items that you can have “refused” or “don’t know” are probably due to access problems to the boat electronics, unless you carry electronics with you on the boat. The possible refused items are:

- latitude and longitude coordinates with GFormat
- bottom depth & temperature

The other items are dependant on the interviewer monitoring activity on the boat and may not be refused. It is expected that the interviewer will rarely be unable to collect the remaining information for an on-board fishing location. In cases where the interviewer is unable to determine interviewer dependent information the item(s) may be coded as “don’t know” and explained somewhere on the form and on the weekly report.

The location data records are in three sections with the data types clustered:

2A. Coordinate Data – latitude, longitude, geographic format and times

2B. Physical Data – depths, temperatures, observed anglers and fishing type

2C. Pinniped Data – presence and damage from seals and sea lions

2A. Coordinate Data

START	Lat						
	Lon 1						
	Time						
END	Lat						
	Lon 1						
	Time					Gfmt	

Start Latitude – North latitude, or loran in one of the formats in Item 7 at the start fishing time.

Start Longitude - West longitude, or loran in one of the formats in Item 7 at the start fishing time. The hundreds place is pre-coded to 100 with a “1”.

Start Time - This is “lines down” time. Record the time in 24-hour format when fishing started at a new location.

End Latitude – North latitude, or loran in one of the formats in Item 7 at the end fishing time. An ending location is not necessary if the boat did not travel more than 300 feet or fish for more than 3 minutes.

End Longitude – West longitude, or loran in one of the formats in Item 7 at the end fishing time. The hundreds place is pre-coded to 100 with a “1”. An ending location is not necessary if the boat did not travel more than 300 feet or fish for more than 3 minutes.

End Time - This is “lines up” time. Record the time in 24-hour format when fishing ended for this location, troll or drift.

Geographic Format (GFmt) – The measurement units used to record the latitude and longitude coordinates at the start and end fishing times. All four measurements must be in the same units. For longitude all fishing locations on the Pacific coast are more than 100 degrees west of the prime meridian so the hundreds place has been pre-coded with a “1”. Proper punctuation must be used at least in the first row so that the numbers can be validated and entered into the system in the correct format.

The four geographic formats (GFormat) expected to be read from boat GPS and loran equipment (with proper punctuation):

- 1 = Degrees, minutes - DD°MM.MM’
- 2 = Site code – SSSS# (name must be written in Item 8
- 3 = Degrees, minutes, seconds - DD°MM’S”
- 4 = Loran – LLLLL.L

2B. Physical Data

max min	Depths		
max min	Temps		
	ObsAng		Ftyp

Maximum Bottom Depth – Record the maximum bottom depth in feet.

Minimum Bottom Depth – Record the minimum bottom depth in feet.

Maximum Surface Temperature – Record the water temperature in degrees F. This is the maximum water temperature at or near the surface at this location.

Minimum Surface Temperature – Record the water temperature in degrees F. This is the minimum water temperature at or near the surface at this location.

Observed Anglers (ObsAng) – Record the number of anglers observed for the catch tallies at this location.

Fishing Type (FTyp) – This is one of the four predefined types of boat movement used for the fishing activity:

- 1=Free drift (engine not in gear)
- 2=Stationed (engine in/out of gear to maintain position)
- 3=Anchored (boat attached to the bottom)
- 4=Troll (engine in gear and powered to trolling speed)

2C. Pinniped Data

This is data collected for the observed angler group. The observed angler group should not change during fishing at a location in order to include someone who is being impacted by a seal or sea lion. You pick your group at random, if it is not the

whole boat load, and stick with it. Changing your group because of non-observed angler catch or pinniped impacts is an obvious sampling bias. Record the total number of lost gear, bait, time and fish for your observed angler group.

	1=Yes 2=No			Seal		Movd
LOST	Gear Time			G		T
	Bait Fish			B		F

Seal (Pinniped Present) – Record if seals or sea lions were within 100 yards of the boat during fishing time at this location.
 1 = Yes (fill remaining boxes)
 0= No (leave remaining boxes blank)

Moved Boat (Movd)– Record if the boat left this location due to the presence of seals or sea lions. Remember, some fishing time is required at the location for the location to be recorded, so this box can not be used if lines were never dropped into the water.

1 = Yes
 0= No

Gear Lost (G)– Record the total number of gear setups lost to seals or sea lions during fishing time at this location by the observed anglers. “00” = None lost.

Time Lost (T)– Record the total number of minutes lost to seals or sea lions during fishing time at this location by the observed anglers. “00” = None lost.

Bait Lost (B)– Record the total number of baits lost to seals or sea lions during fishing time at this location by the observed anglers. “00” = None lost.

Fish Lost (F)– Record the total number of hooked sportfish lost to seals or sea lions during fishing time at this location by the observed anglers. “00” = None lost.

3. Species Tally Data

There are rows for species tallies for each location column. There are 2 items for each species to record for the entire row: the common name and the species code. Either the 3 digit or 10 digit codes may be used. On the back of the form a smaller space is provided to write a shorthand name for the species for each row. The form may be bent over so that species names can be easily transcribed to the rear of the form.

For each location column there are 2 items to record for each species row: the number of fish kept and the number of fish returned. The numbers of fish must be for the number of observed anglers on the matching location form. The catch per unit of effort for each species at each location will be calculated by dividing the number of fish kept or returned by the number of observed anglers.

Item 1 Common Name - This is the common name same as on the Intercept Form.

		STOP#	1	2	3	4	5
1	KEPT						
	REL						
2	KEPT						
	REL						

Species Code - Use the standard 3 digit RecFIN or 10 digit NODC species codes.

Number Kept - Record the number of fish of species *kept* at this location by the observed anglers. "0" or <blank> = None kept.

Number Released (REL)- Record the number of fish of species *released* at this location by the observed anglers. "0" or <blank> = None released.

Recording Numbers Kept and Returned

The method used for recording the tally for fish kept or returned is called the "dot-line system". The system allows for a count up to ten in less space then the more common "tally-mark" (i.e. IIII) system does going to five. It is desirable that when editing your forms for the day that the sampler will decode the dot line system by writing the actual number to the right.

dot-line system	
1	• 6 I:
2	: 7 II
3	:: 8 III
4	::: 9 IIII
5	I: 10 IIII:

1	Boc Rf										KEPT	0
	8	8	2	6	0	1	0	1	2	7	REL	III I:

Example. At the first location the number of bocaccio rockfish kept is 0 and the number released is 27.

BACK OF FORM

		STOP#		8		9		10		11		12		13		14		15			
dot-line system	START	Lat																			
	Lon 1																				
1	•	6	⌈:																		
2	:	7	⌋⌋																		
3	:.	8	□																		
	END	Lat																			
	Lon 1																				
	:	8	□																		
	:	8	□																		
	⌈:	8	□																		
	⌈:	8	□																		
Ftyp: 1=Drift 2=Stat 3=Anchor 4=Troll Gfmt: 1=deg,min 3=deg,min,sec 4=deg		min	max	Depths																	
		min	max	Temps																	
		ObsAng				Ftyp				Ftyp				Ftyp				Ftyp			
		1=Yes 2=No		Seal	Movd	Seal	Movd	Seal	Movd	Seal	Movd	Seal	Movd	Seal	Movd	Seal	Movd	Seal	Movd	Seal	Movd
SPECIES	LOST	Gear	Time	G	T	G	T	G	T	G	T	G	T	G	T	G	T	G	T		
	Bait	Fish	B	F	B	F	B	F	B	F	B	F	B	F	B	F	B	F	B	F	
1	KEPT																				
	REL																				
2	KEPT																				
	REL																				
3	KEPT																				
	REL																				
4	KEPT																				
	REL																				
5	KEPT																				
	REL																				
6	KEPT																				
	REL																				
7	KEPT																				
	REL																				
8	KEPT																				
	REL																				
9	KEPT																				
	REL																				
10	KEPT																				
	REL																				
11	KEPT																				
	REL																				
12	KEPT																				
	REL																				

Assign		Stops:	5	Spp:	8	STOP#	1	2	3	4	5	6	7	
1	00	Sampler= Billy Bob				START	Lat	324823	324801	325334	330240	330275		
2	00	Date				Lon 1	182417	182631	183142	183744	183780			
5	00	Boat #				Time	601	916	1039	1233	1450			
Big Game 90		=Boat				END	Lat				330238			
0	37	Cnty= LA				Lon 1					183743			
0	17	Site / Lndg= Long Beach				Time	849 3	941 3	1120 3	1445 3	1510 1			
0	29	Elg.Angs. Marina				min	Depths	65	72	54	48	190	120	
0	6	Trip Type= Overnight				max	Temps	58	58	58	58	59		
1		Area San Celm, Mike =Capt				ObsAng	10 3	10 3	8 3	8 1	10 3			
Area: 1=US<3mi 2=US>3mi M=Mexico						1=Yes 2=No	0	1	0	0	0			
Ftyp: 1=Drift 2=Stat 3=Anchor 4=Troll						Seal	Movd	1	1	0	0			
Gfmt: 1=deg,min 3=deg,min,sec 4=deg						Seal	Movd	0	0	0	0			
TrpTyp: 1=am1/2, 2=pm1/2, 3=mid1/2, 4=twilight, 5=3/4-1dav, 6=ovrnight, 7=other						Seal	Movd	0	0	0	0			
Boc Rf						LOST	Gear	Time						
1	8826010127	KEPT												
		REL				XXIJ	27			II	8			
KB						KEPT	XX.	13		.	1			
2	8835021602	REL				:	2			0				
Olive Rf						KEPT	.	1						
3	8826010158	REL						4						
Ocean WF						KEPT		0		0				
4	8835220101	REL				::	4		::	3				
1/2 moon						KEPT	XX.	11						
5	8826010159	REL				:	2							
Treefish						KEPT		0						
6	8826010159	REL				::	3							
Ling						KEPT		.	1	1:	6			
7		REL					::	3		:	2			
Goph Rf						KEPT		.	.	1:	2			
8		REL						0	.	0	1			
9		REL												
10		REL												
11		REL												
12		REL												

DESCRIPTION: Sampler Billy Bob went on an overnight trip on the Big Game 90 (boat# 500279) with 29 anglers out to the San Clemente Island area with Captain Mike from Long Beach Marina in Los Angeles County. The boat made 5 stops and 8 species of fish were caught from 8 to 10 observed anglers between 6:01am and 3:10pm. The first three and last stops were anchored and the fourth was a long 2 hour drift where then depth ranged from 48 to 190 feet, both the starting and ending coordinates were recorded. The third stop was interrupted by the presence of pinnipeds (seals) that took 5 baits, 2 set of gear and one fish and resulted in having to loose about 18 minutes of fishing time and moving the boat to a new fishing location. The first stop was the most successful, however a lot of bocaccio were thrown back. The last stop had no fish caught among the observed anglers. The sampler used the three digit species codes to code the species 7 and 8 and 10 digit codes for the last two species. The sampler took the time to decode the dot line system fo make key entry go easier, including zeros for pairs of kept and released numbers of observed fish for stops with fish. The stop with no catch was marked with a vertical line. Stops with no pinnipeds (seals) were marked with "0"=none.

ON-BOARD PASSENGER FISHING VESSEL SAMPLING

Sheet of

Assign Stops: Spp:

Sampler=

Date

Boat #

=Boat

Cnty=

Site / Lndg=

Elg.Angs

Trip Type=

=Capt

Area: 1=US<3mi 2=US>3mi M=Mexico
Ftyp: 1=Drift 2=Stat 3=Anchor 4=Troll
Gfmt: 1=deg,min 3=deg,min,sec 4=deg
TrpTyp: 1=am1/2, 2=pm1/2, 3=mid1/2, 4=twilight,
 5=3/4-1day, 6=overnight, 7=other

		STOP#																			
		1				2				3				4				5			
START	Lat																				
	Lon 1																				
Time																					
END	Lat																				
	Lon 1																				
Time					Gfmt				Gfmt				Gfmt				Gfmt				
min max	Depths																				
min max	Temps																				
ObsAng	Ftyp																				
		1=Yes 2=No	Seal	Movd	Ftyp																
LOST	Gear																				
	Time																				
Bait																					
Fish																					
KEPT	REL																				
		G	T	B	F																
1																					
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					

BACK OF FORM

		STOP#	6				7				9				9				10			
dot-line system		START	Lat																			
1	•		6	┆																		
2	:		7	┆																		
3	:		8	┆																		
		END	Lon 1																			
			Time																			
			Time				Gfmt				Gfmt				Gfmt				Gfmt			
		SPECIES	min max																			
			Depths																			
			min max																			
			Temps																			
			ObsAng				Ftyp				Ftyp				Ftyp				Ftyp			
			1=Yes 2=No		Seal		Movd		Seal		Movd		Seal		Movd		Seal		Movd			
		LOST	Gear Time		G		T		G		T		G		T		G		T			
			Bait Fish		B		F		B		F		B		F		B		F			
1	KEPT																					
	REL																					
2	KEPT																					
	REL																					
3	KEPT																					
	REL																					
4	KEPT																					
	REL																					
5	KEPT																					
	REL																					
6	KEPT																					
	REL																					
7	KEPT																					
	REL																					
8	KEPT																					
	REL																					
9	KEPT																					
	REL																					

Gfmt: 1=deg,min
 3=deg,min,sec 4=deg
 Ftyp: 1=Drift 2=Stat
 3=Anchor 4=Troll

BACK OF ADDITONAL SHEET

dot-line system			STOP#																	
1	·	6	┆	START	Lat															
2	:	7	┆		Lon 1															
3	.	8	┆		Time															
	:		☐	END	Lat															
	:		☐		Lon 1															
	:		☐		Time	Gfmt			Gfmt			Gfmt			Gfmt			Gfmt		
				<small>min max</small>	Depths															
				<small>min max</small>	Temps															
					ObsAng	Ftyp			Ftyp			Ftyp			Ftyp			Ftyp		
					1=Yes 2=No	Seal	Movd	Seal	Movd	Seal	Movd	Seal	Movd	Seal	Movd	Seal	Movd			
					Gear	G	T	G	T	G	T	G	T	G	T	G	T			
					Bait	B	F	B	F	B	F	B	F	B	F	B	F			
					LOST															
					# SPECIES															
					KEPT															
					REL															
					KEPT															
					REL															
					KEPT															
					REL															
					KEPT															
					REL															
					KEPT															
					REL															
					KEPT															
					REL															
					KEPT															
					REL															

Gfmt: 1=deg,min
 3=deg,min,sec 4=deg
 Ftyp: 1=Drift 2=Stat
 3=Anchor 4=Troll

EXAMPLE

1 Assign	Stops: 5 Spp: 8	STOP#	1	2	3	4	5	
1 0 0	Sampler= Billy Bob	START	Lat	3 2 4 8 2 3	3 2 4 8 0 1	3 2 5 3 3 4	3 3 0 2 4 0	3 3 0 2 7 5
2 0 0 3 0 3 2 9	Date	Lon 1	1 8 2 4 1 7	1 8 2 6 3 1	1 8 3 1 4 2	1 8 3 7 4 4	1 8 3 7 8 0	
5 0 0 2 7 9	Boat #	Time	601	916	1039	1233	1450	
Big Game 90 =Boat		END	Lat				3 3 0 2 3 8	
0 3 7	Cnty= LA	Lon 1					1 8 3 7 4 3	
0 1 7	Site / Lndg= Long Beach Marina	Time	849 3 Gfmt	941 3 Gfmt	1120 3 Gfmt	1445 3 Gfmt	1510 1 Gfmt	
0 2 9	Elg.Angs.	^{min} / _{max} Depths	65	72	54	48	190	120
0 4	Trip Type= overnight	^{min} / _{max} Temps	58	58	58	58	59	
6	Area San Celm, Mike =Capt	ObsAng	10 3 Ftyp	10 3 Ftyp	8 3 Ftyp	8 1 Ftyp	10 3 Ftyp	

Area: 1=US<3mi 2=US>3mi M=Mexico
 Ftyp: 1=Drift 2=Stat 3=Anchor 4=Troll
 Gfmt: 1=deg,min 3=deg,min,sec 4=deg
 TrpTyp: 1=am1/2, 2=pm1/2, 3=mid1/2, 4=twilight,
 5=3/4-1dav. 6=overnight. 7=other

1=Yes 2=No	0 Seal	Movd	1 Seal	1 Movd	0 Seal	Movd	0 Seal	Movd	0 Seal	Movd	
LOST	Gear Time	G	T	2 G	1 8 T	G	T	G	T	G	T
	Bait Fish	B	F	5 B	1 F	B	F	B	F	B	F

1	Boc Rf	KEPT	0				0	
	8 8 2 6 0 1 0 1 2 7	REL	☒ IIJ	27			II	8
2	KB	KEPT	☒ ::	13			1	
	8 8 3 5 0 2 1 6 0 2	REL	:	2			0	
3	Olive Rf	KEPT	.	1				
	8 8 2 6 0 1 0 1 5 8	REL		4				
4	Ocean WF	KEPT		0			0	
	8 8 3 5 2 2 0 1 0 1	REL	::	4		-	3	
5	Ling	KEPT		.		1	II	6
	3 0 7	REL		::		3	:	2
6	Goph Rf	KEPT		.			1 :	2
	2 8 8	REL				0	.	1

7 DESCRIPTION: Sampler Billy Bob went on an overnight trip on the Big Game 90 (boat# 500279) with 29 anglers out to the San Clemente Island area with Captain Mike from Long Beach Marina in Los Angeles County. The boat made 5 stops and 6 species of fish were caught from 8 to 10 observed anglers between 6:01am and 3:10pm. The first three and last stops were anchored and the fourth was a long 2 hour drift where then depth ranged from 48 to 190 feet, both the starting and ending coordinates were recorded. The third stop was interrupted by the presence of pinnipeds (seals) that took 5 baits, 2 set of gear and one fish and resulted in having to loose about 18 minutes of fishing time and moving the boat to a new fishing location. The first stop was the most successful, however 27 bocaccio were thrown back. The last stop had no fish caught among the observed anglers. The sampler used the three digit species codes to code the species 5 and 6. The sampler took the time to decode the dot line system fo make review and key entry go easier, including zeros for pairs of kept and released numbers of observed fish for stops with fish. The stop with no catch was marked with a vertical line. Stops with no pinnipeds (seals) were marked with "0"=none.