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Commercial Catch Sampling - 2007/08 v1

There are two reasons we are collecting samples from our commercial catch.

1. The first is that PICL have won the MFish contract that requires a percentage of the commercial catch to be sampled (measured).
2. The second is we want to build up additional data on the commercial catch from all parts of fisheries (not just the random small percentage that satisfies the MFish contract in 1 above).

In the 2007/08 fishing year we are going a step further and asking that when e-divers are using GPS and depth data loggers that they also partake in this catch sampling project so that we end up with their GPS location, depth profile and a percentage of their catch sampled for each of their dive events (**note:** a dive event starts when an e-diver gets into the water and ends when they get out of the water i.e. if you work a reef and then get into your boat and move along the coast to a new location you are starting a new dive event). Listed below are the details of this catch sampling project.

The Commercial Catch Sampling kits (CCSKits) contain:

	#
Tylox green tag with the same number on each tag	2
A red 800mm X 480mm Onion sack with a draw sting around the top	1
Nylon cable ties	3
Instruction sheet with data entry section on water proof paper & pencil	1
All of above will be contained in a zip lock plastic bag	1

Divers will have a number of these kits issued to them. They carry these CCSKits on their boat and on finishing a dive event they need to:

1. Open the CCSKit (plastic bag) and take out – the green tags, cable ties, pencil and form.
2. We need approximately 120 to 150 shells to measure so you will need to calculate how many bins / sacks you need to tag i.e. if your paua are small and your bins large you might only need to tag 1 bin but if your paua are large and your bins small you might need to tag 2 bins. **ONLY TAG THE NUMBER OF BINS REQUIRED.**
3. The bins you tag need to be randomly selected from what you have caught during the dive event. Table TWO is a random selection table that will tell you

- which bins to tag (based on the order the bins were landed in). Remember the aim here is to tag enough bins to give us between 120 and 150 paua. Put a tag on each of the bins you have identified for this catch sampling exercise.
4. Write your name on the back of the green tags.
 5. Fill in the data entry sheet (see TABLE FOUR for an explanation).
 6. Put the data sheet, pencil and any unused tags back into the plastic bag, close the zip lock top and put the plastic bag into one of the tagged bins.
 7. Deliver your catch as per normal to the LFR and make sure that the tagged bins are stacked in groups (ie. The same number tags are stacked together).

The LFR sees the tagged bins and does the following:

1. Take the plastic bag out of one of the bins and remove the red sack, a cable tie, data entry form and pencil.
2. Fill in the LFR section of the data entry sheet.
3. Shuck the paua contained in the tagged bins (this bins with tags the same number) and put those shells into the red sack. NOTE – we are after 120 to 150 shells per sample so once the red sack is full the rest of the shells can be put in with the others belonging to the person owning the shell.
4. Remove the green tags from each bin and **put everything except one of the green tags into the plastic bag**, shut the Zip-lock seal and put the plastic bag into the red sack (on top of the shells).
5. Pull the draw sting on the sack closed and tie it off then put the green tag around the neck of the sack (you can write the name of the shell owner on the back of the tag if they haven't already do this).
6. **Make sure there is a tag around the neck of the red sack and that the plastic bag with the other tags / data form etc is inside the red sack** – that way we will know whose shell it is.
7. The sack then joins the other shell belonging to the ACE holder / quota owner.
8. The ACE holder / quota owner has the choice of:
 9. keeping all red sacks aside and getting the PICL shell measuring technician to measure the shell from these sacks a couple of times per year or
 10. If their shell buyer is OceanShell in Riverton or Ariki in Marlborough they can send the red sacks to them along with their other shell and OceanShell / Ariki will organize to have the shell from the red sacks measured and put back into their system for grading / payment etc.

A PICL employed technician then visits the ACE holder / quota owner or OceanShell and separates all of the red sacks. He then:

1. Opens the sack and removes the plastic bag.
2. He then tips out the shells, measures them, puts the shells back into the red sack) and ties it off.
3. He places a WHITE tylock tag around the neck of the red sack with the name of the owner written on it. Red Sacks with no green tag but which have a white tylock tag means that the shell in the sack has already been measured.

4. He then completes the data sheet, puts it and the tag back into the plastic bag and takes the plastic bag with him.
5. He then enters the information from the data sheet into a Word document table and emails it to PICL.
6. PICL forward the file on to be processed with the data from the CPUE and Depth / Temp data loggers.
7. The plastic bag, pencils and tags are then re-cycled for use again.

There needs to be an incentive for people to participate in this sampling programme. Therefore for every 4 CCSKits completed, the e-dive crew will receive a dozen beer and every 8 CCSKits the LFR's handle they will receive a dozen beer. This means if crews are diving two dive events per day they could earn a dozen beer every 2 days of diving (the staff at the LFR's will also do well).

Any Questions – please contact Jeremy Cooper 0274 323041 or cooper@xtra.co.nz

Table TWO

RANDOMISED TABLE FOR BIN SELECT

BINS CAUGHT DURING THE DIVE SESSION	BINS TO SELECT			
	1st	2nd	3rd	4th
1	1	1	1	1
2	1	1	2	2
3	1	2	3	1
4	2	3	1	4
5	5	1	4	3
6	6	5	3	2
7	3	2	6	5
8	7	6	1	3
9	1	9	4	5
10	4	10	6	1
11	10	2	11	6
12	2	12	9	7
13	2	1	9	10
14	5	10	7	8
15	8	12	2	3

Instructions on using the randomized table to select which bin to tag.

Step One: Work out how many bins you need to select – we are after approx 120 paua so the number of bins required will depend on the size of your paua and the size of your bins. As an example if you paua are small and your bins large and each bin holds 80 paua then you will need to tag 2 bins (2 bins at 80 paua = 160 paua in the tagged bins).

Step Two: Look down the first column “Bins caught during dive session” (the numbers are in bold red) and select the row that has the number of bins the dive crew have caught during the current dive session.

Step Three: The first column will tell you which is the first bin you should tag (i.e. if the number in the 1st column is 3 then tag the 3rd bin you landed – if the number is 8 then tag the 8th bin you landed).

As an example if you landed 8 bins during the dive session and you needed to tage 3 bins to get 120 paua you would be tagging the 7th, 6th and 1st bins that you landed for that dive session.

Table Four**Explanation of Data Entry Form**

	Explanation
Tag number	This will already have been entered on the data entry sheet. Each CCSKit has 3 tags with the same number on each.
Your name	Enter your name so we have a record of who to contact if we have trouble reading your writing on the data enter form.
QRN:	The QRN number of the person landing the paua
Catch Date	The date the paua were caught - enter the date as normal NZ entry (YY: MM: DD)
Landing date	The date the paua were landed - enter the date as normal NZ entry (YY: MM: DD)
Port of Landing	Where you came ashore.
Boat Registration	The registration number of your boat.
Location of dive event	GPS coordinates and best but a detailed description (so GPS coordinates can be calculated will do). NOTE – it is important that you enter the location as we need to know where the samples have come from (so we can compare growth rates, different parts of the same coast etc).
Number on dive event	Enter the Number of divers in the dive event.
Boat Boy	Tick YES or NO depending on whether you used a boat boy during the dive event.
Estimated total catch (kgs)	Enter the total estimated catch in kilos for the dive event – this is the estimated total catch for the diver that is filling in this CCSKit.
Number of bins tagged	Normally this would be 3 bins but it could be less if less than 3 bins were caught during the dive event. Could be less than 3 if less was caught
Swell	Tick the corresponding box that best records the swell height during the dive event (in metres).
Visibility (metres)	Tick the corresponding box that best records the under water visibility during the dive event (in metres).
LFR	Write in the name of the LFR where the catch is processed.