

2-5 DECEMBER 1980 - MOLOKAI
24 AUGUST 1982 - MAUI
27 AUGUST - 1 SEPTEMBER 1982 - MOLOKAI
→ BOOK I ←

BALAZS
P. 70 Bullpenchewing

G.H. BALAZS

MOLOKAI #1

LIBRARY OF
GEORGE H. BALAZS

BALAZS

1980

1982

2 of 2

29 AUGUST 82

Sunday.

29 AUG
SUNDAY*
no
mud in
stomach

Nothing, with plenty of maggots.
Carapace, (plastron, head all front and
hind flippers present. Also full
stomach (no intestines?) which was
full of fresh looking Holothrix and
small amounts of Amansia. Small
deep head in same pile. None of
this could be more than 4-5 days
old. No tags on flippers - sites
visible.



definitely

called
CIN

Several close-up photos taken.

About 6 vehicles came to unload garbage
while I was there for 30 minutes.
At other dumping location, I found
a large pile of opihii shells.
Sample taken to see what percentage
are undersized.

Left landfill and proceeded out
to Waialeale. Drove down
trail by Ioli Pt. Found van and
2 motorcycles - 4 people camping.

29 AUGUST 82

SUNDAY

Watched nearshore waters at Petroglyph site - then moved down to Uaiabane where I watched from ~ 5pm to 6:45pm. No turtles seen. Tide seemed to recede rapidly. Wind decreased a lot - calm inside. Radio reports all islands 10-20MPH. At ~ 6:30pm I walked on the beach to the east a short distance looking for fecal pellets in debris line - none seen. Cow manure seen - does this help to fertilize algal/sea grass growth in nearshore waters? A short distance down the beach I found a presumably brackish water area behind beach. Does this drain down from the mountains (foothills)? River/wash bed? Near here a short distance above the high tide line I found a ^{sc}ca 60 cm carapace 3/4 buried in dry sand - back up. Still rotting some underneath. Also the plastic on the surface completely dried up. This could be 1-2 months old. Departed at 6:45pm - it takes about 30 minutes to drive out - dodging the cattle. Only one car seen on the road during this trip in and out. None seen on Friday.

called
CIN

29 AUGUST 82

SUNDAY

Returned to Pau Hana at
 7:30 pm - Telephone Bill Puleloa
 at 553-3778 who just returned from
 Honolulu with his family.
 He fried chicken dinner at Pau Hana Inn;
 worked on data - went to bed
 ~ 10:30 pm.

BILL PEN
 FIRST TIME
 OUT WITH
 ED

30 AUG
Mon.

"VISITAN"

UP about 5 am - called B. Bilwaring -
 Bill Puleloa picked me up at
 ~ 6 am - drove to Eddy Medeiros'
 house - on main highway near
 to Pau Hana. His Grandpa
 taught him this style of
 net fishing - Ed (and wife Diane,
 son Joe) moved here from the
 mainland last year. He was
 raised on Molokai. Grandfather
 name is Petronella (sometimes (spn - "PETO")
 called "Dun" - or just Grandpa Bicoy.
 Came to Hawaii in 1924. No
 mangroves at that time. Helper
 is Hawaiian named "Simie"; Bill
 son's name - Mike or Miki - born
 in the Marshall Island. Bill
 was there for ~ 8 years. Truly
 launched flat-bottomed home made boat
 from wharf at ~ 6:40 am. nets
 were already in boat - 1 - "bog"
 2 - side panels and 1 - "center"
 GUIDE

30 AUG
Monday

NOW
 TO RAUCINS
 4/85

They sewed it together

30 AUG 82 All white nylon twine - bag is 1 1/2" Monday mesh - center, 2". Lots of lead on bottom line, plastic floats on top. Depth - 12'. 25 hp and 15 hp on boat, which is ~~20~~ total. First we motored outside reef to the east, then crossed back inside reef at a "double breaker" spot. Continuing motoring toward shore, but lower tide made it difficult due to many shallow "rocks" (live coral heads). Headed through shallow water 3-4' deep toward "house" built out on the reef flat. Owned by (and built by) Bicoy before, but leased from "Harbor" reportedly sold for \$2000. When Ed was young, he remembers that turtles were kept in a pen under the house - lifted up with a rope when needed. He ate many turtles - loves the taste; "better than beef."

Now
TO RAUCINS
4/85

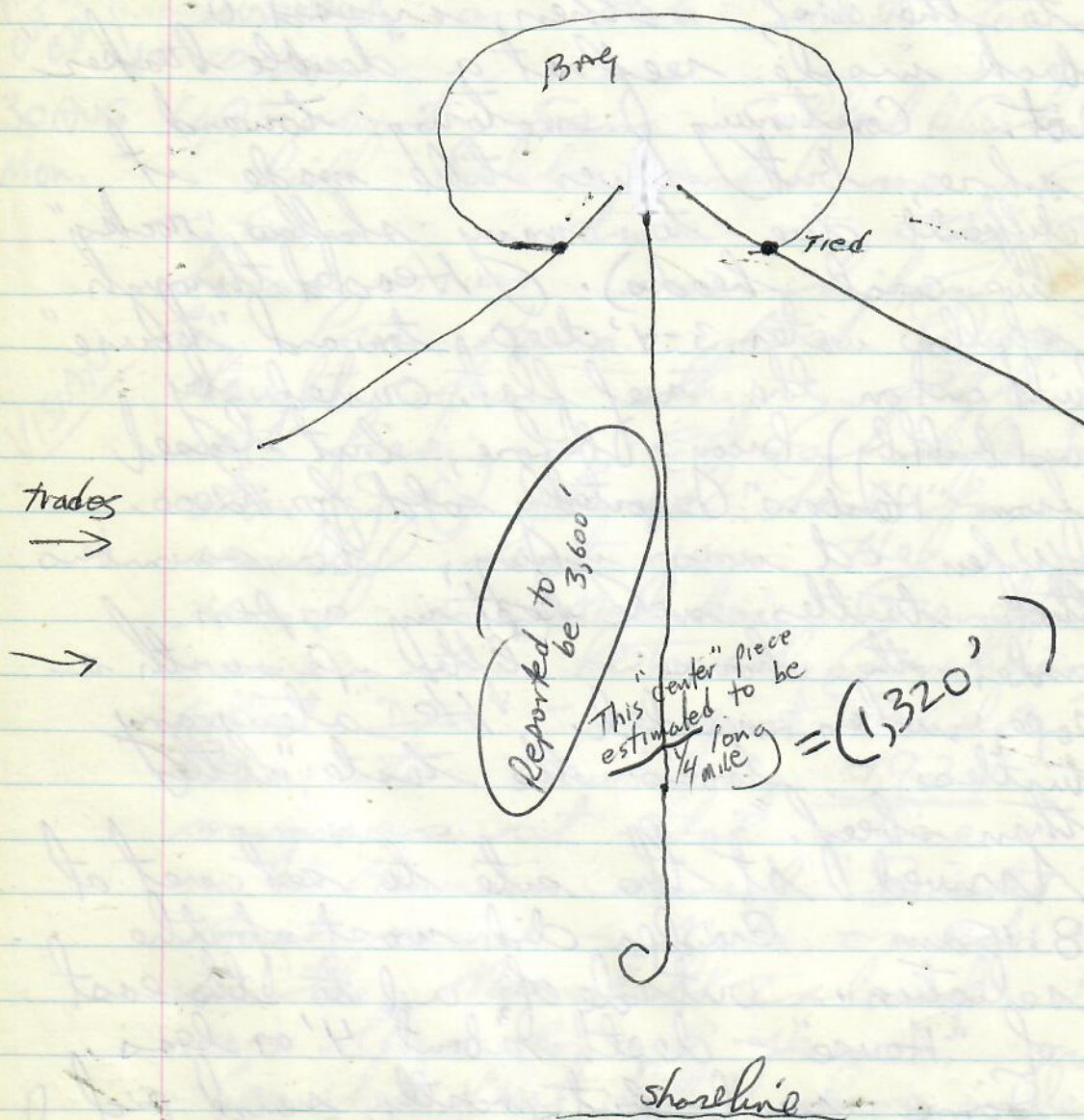
Arrived at the site to set reef at 8:15 am - Grandpa did most of the selection. outside of, and to the east of "House" - depth about 4' or less.

Some coral, but mostly sand and silt bottom. While motoring here I saw several large patches of Halpils in shallow sand bottom. Also

MONDAY
30 AUG 82

saw lots of Acantlophora growing in shallows. I took several photos while nests were being set. Completed by Gam. Configuration looked like this -

↑ south



30 AUG 82 ^{Hammurhead}
 MONDAY Sharks have been a problem in this
 Palagan region, because you have
 to "head" the fish in the bag by
 jumping in with them. Large *Clua*
 taken out by spearing them. They also
 catch oeo (Gorefish), Palani.

Reportedly this is the only net
 fishing of this type on Molokai.
 There used to be another one, but
 no longer. Ed has set the
 net only once or twice before in
 this region. Usually set
 at the eastern end, but that
 is more exposed to wind. Also,
 he has had trouble down there
 from an "east group" who feels it
 is their fishing grounds. They have
 looped the lead line over the float
 line; also set gillnet in bag to
 catch the fish.

Fish all
 swim out

Ed has seen turtles, some big,
 in "houses" in ~25' off wavecrest
 and kamalo, outside the reef.

Snorkel Diving. Also, he has
 seen a "house" at Kolo. Bill
 reported that many years ago (~50)
 a Mr. "RIN" sold turtles to the
 Hawaiians at Kamalo wharf.
 Caught them with nets, (and
 gift?)

Son is
 Alfredo
 RIN

30 AUG 82

MONDAY

Bill mentioned that he has been to Bikar ^{in Sept.} via Japanese pole & line boat. No regular way to get there. He has also been to a Marshall Is. to the north of Bikar. Take 1 hour to walk around Bika Island - turned ^(kept 4) 28 turtles in that time. Saw some adult hawksbills too.

After setting the net, we motored out toward "G" to the east - just east of "house". Anchored and everyone went spear fishing. I swam out more, not too far from fringing reef line. Water turbid but still ~ 15-20 visibility. Drove along coral structures with sand bordering bottom. At one dead-end area going out toward ^(Break) waves, a turtle came up from the bottom, tried to swim over me and I grabbed it. Took it back to the boat where I took photos, tagged and measured it. Used from Bill's tag supply.

Palaau

6376 LFL

recap.
4-23-85 at
Palaau

C - 57.5 x 53.2 cm

6377 RFL

Fats of red skin algae; clean shell, except for small areas of

③ Ask Sheraton if
any tries to sell them turtle,
one ever

73

30 AUG 82

NOTE -

- ① Call me if you get a tagged turtle
- ② undertake search for tags in drawers

coralline algae and scum.

Spear fishers came back with 1 ~ 8/6 ulua, and 20-25 ~~tole~~ (acanthuroid) like Tahiti's Maito.

Returned to Kaurakakai wharf at ~ 11:45am. Much easier return, because tide is now up. At wharf we tied off. Went to Ed's one year old, "Genesis 1:26". Reportedly he tried bottom fishing with this last year, but didn't do too good.

Notes - "He has never caught a turtle with a tag

2. Feels there are "plenty turtles" along south Molokai
3. Catches alot - (up to 6 each time)
4. San "Joe" said 2-3 each time
5. Reportedly rotates, so fishes each site once every 6 months.
6. Market is U. F. A. ^{United Fishing Agency} Goto.

Also, a man who sells to Samoans on Oahu; prices not as good on Maui

7. Throws "small" ones back
8. Bag limit on Papio (20 day) now being enforced for commercial fishermen^{too}
9. Need fishermen names on Molokai who turned-in tag recoveries.

FROM
FEW
years

30 AUG 82 Showered, and then ate lunch
 MONDAY at Hop Inn because everything
 else is town was closed up!
 Wrote up data at hotel.

Newspaper weather for day said
 "15-30 mph - gusty trades."

At 5 pm I drove to ^{"DUMPING AREA"} stream that
 flows to ocean just west of Bill
 fishing shack on the beach. Bill
 found turtle remains along here, so
 I looked around. Two piles
 of opihiki shells seen. Found small
 dried bone from small carapace in
 dusty road.

Stopped at "Larry Rawlins" Chevron.
 They have a hanging scale and
 ice chest that they sell fish
 out of. Walked around beach shacks -
 nothing seems to be in much active use.

Drove out "Beach-right-of-way" road
 looking for trail shown on map
 that is believed to lead to
 shore where Bicoy "House" can be seen.
 At the turn-off where I
 suspected it to be, I found a
 chained gate saying "no trespassing".

Tel. 521-4266 / 531-5719
 700 Richards Apt 1110
 Ron Nolan

Mobokai Ranch. Also "Future SITE OF ORCA SEA FARMS".

Returned to Hotel. Called Lin. Worked data.
 Went to bed ~ 9:30pm

2ND DAY
 OUT W/ED →
 31 AUG 82

TUESDAY

Up ~ 4:30am. Left the dock at ~ 6am. Motored along outside the reef, then went over onto reef flat before "harbor" - motored up to net arriving ~ 6:50am. While coming over ^{spot low} coral heads, we scared out a ~ 70cm turtle. Cousin "Byron" on this trip too. At the bag, several turtles were seen swimming around, frequently ramming into the net, pushing and pulling the floats down. Some distance down the center piece, we saw presumably another turtle pushing against the net, but later went down there nothing was found. Smilie caught the turtles - the 2 large ones Bill and I tagged and release from the stern. The smaller one was tagged and released as we were leaving later.

Turtles can let fish escape when doing this.

76

PALAU

31 AUG 82
TUESDAYDATA ON THE 3 TURTLES
ARE AS FOLLOWS:

6378 RFC

C-79.5 x 73.0

6379 LFL

6380 3rd Scale Rightphotos taken
w/ Mike, Bill's son

6381 RFC

C-77.6 x 69.5

6382-3rd Scale R

photo with Grandpa Bicoy

6383 LFL

6384-3rd Scale L

31 AUG 82

Summary of these pages -
Lilian Molo-oka

DATE	TAGS	METHOD	CURVED	CARRIAGE
8/30/82	6376 LFL 6377 RFL	Hand capture	57.5" x 23"	53.2" x 21 1/4"
8/31/82	6378 RFL 6379 LFL; 6380 3 rd RS	net	79.5" x 31 3/4"	73.0" x 29 1/4"
8/31	6381 RFL 6382-3 rd RS 6383 LFL; 6384-3 rd SL	net	77.6" x 30 3/4"	69.5" x 27 3/4"
8/31	6385 RFL 6386 LFL	net	56.7" x 22 3/4"	51" x 20 1/2"

allow forward

31 AUG 82

TUESDAY

C- 56.7 x 51

6385 AFL

6386 AFL

no photos; Brownish & cream yellow
in color; Shell formed
to pointy PC's,

31 AUGUST 82

TUESDAY

After the turtles were taken care of, I swam completely along the center of piece of the net. 2 *Uca* were found caught in net - "gilled" but not always at gills. Also found one large lobster, which was taken back to the back and, I believe, hidden. Lobster season now?

Question: What is the difference between this net and a "lobster" net?

When the center goes into the bay the depth was 3-4' inshore it was set in only ~2' of water.

For much of the way, starting from the bay, the bottom was bare - coral "chips" mixed with silt. In the shallower area, fleshy algal growth became increasingly abundant - consisting of Sargassum, Lamureia, Acanthophora, and others, not readily known to me, but seen before. In discrete areas, there were patches of Halophila forming elevated mounds. Apparently root system stabilizes. Halophila was not very abundant in

IDEAS / Thoughts

1. Exemption (for subsistence) for people on "Homestead" land?
2. Use Bicoy "House" for turtle research base in the area. Owner?
3. Extemporaneous / informal seminar Na Pali
Maalaea
MOLOKAI
4. S. Molokai / N. Lanai appears to be one of the few places in Hawaii where turtles feed heavily on sea grass.
5. "Aquatic Biologist" position as a base - In this, would one qualify for 'Sea Grant' money?
6. Rights of Kaulaapa residents (not just Hawaiians) to use wild resources as they wish. Or ~~is~~ is it just marine resources?
7. Ed says that second day of net fishing at the same site gives a decreased yield.
8. Bill reports that Kaulaapa ^{OF FISH} was formerly the capital city of Molokai - nice chuate. But Molokai Ranch (and pineapple company?) wanted it moved to Kaulaapa.

TUESDAY

31 AUGUST 82

the area I covered - in shallower end, small areas but fairly dense at the sites where it is growing.

Yellow single engine plane flew over the reef flat very low - reportedly a fish spotter.

Ed's catch consisted of mostly ~~weke~~. Also 1-5 lb Culva, 1-10 lb baracuda and other miscellaneous. Most weke were net scared.

Bill mentioned that many small fish were dead caught in mesh. Destructive impact of this fishery?

Grandpa Bicoy ^{-78 yrs old} said this type of fishing in the Philippines is called "BACTOT". There they use stakes and Ratan.

He reports that a "Hokoluh" or Oahu boat recently set a turtle net by Koko wharf. They know that because the prop., or trolling hook, of another boat snagged on it.

Bill reports that Alfredo ^{RIN}

TUES.

31 AUG 82

(Mr. Riv's son) says turtles
"come up" on Keawe Nui (islet
by fishpond?)
George Harada, head of Molokai state
irrigation - water - fired him today.

At a cheeseburger at Pan Hana;
Drove up-country to Bill's office
at Hoolehua; took photo of
Il Point and Bicoy house, with
pineapple fields in foreground.
At office talked with, and interviewed:

send
poster

1. James K. Mawae - (father - "kele")
P.O. Box 145
Hoolehua, Molokai 96729
Customian of Hoolehua
School - fighter
(Photo in Nat. Geo.)
- " 2. Scott Adams (saw flippers at landfill)
- " 3. Tomi Matiyoshi sp? - lives at
east end.

- I. Information - They have a Rodden - Son diving Sci BS
since 6 yrs.
 - a.) "Big" turtles occur on Lanai
off Keomuku - where coconut grove is
 - b.) Also from 3. - Lots of turtles 1/2 size
aggregated within 150 yd stretch
on Shigunck beach - Lanai - inside reef
in shallow water; mud bottom, coral sides.

Post-Notes
where Robert
speared the
Turtle?
That was
just east
of the wreck

Site is about 1/4 of the way from
large shipwreck (cement ship) going toward
smaller shipwreck at Awaia

- c.) Family caught a subadult hawksbill
(where?) in a lobster net. Dead,
therefore meat was not good. They saved
shell.
- d.) August Rawlin, father of Brothers, has
a large green turtle shell - caught
many years ago. Longer than span of arm
Bill reports that Brothers are
"1/2 Hawaiian"
- e.) "Fewer turtles now" at Kana'o -
You have to dive more to the east
now to find more

f.) a Milton Place used to catch
turtles and sell them on Maui

g.) Ed has been fishing 3-4 months - Believes

- 3. a) Has a 24' boat - reportedly
expert diver
- b) Also knows of Shipwreck Beach
site on ~~Maui~~ Lanai.
- c) Heard that previously eggs were laid at
Kainalu (or Honomuni) at East end -
eroded away now.

that laying this kind of net is bad because
it prevents fish from going to the East end.

31 AUG 82
TUES.

- Chart 19351 - Channels

between ... shows Bicoy House
- Chart 19353 - Harbors of Molokai

83

4. a) He worked for Holmes and Narver
at FFS in 1961 or 1962,
building/installing an automatic, people
satellite/missile V? navitor. 15 people
took turtles - turned them on
the beach - picked the best and
then let them rest go. Each person
go one? Saw hatchlings get eaten
by fish. Used hatchlings as bait
for hook.

Bill Puleba reports that while
he was at Majuro turtle would
come in from the outer islands
and be sold for 50¢ pound. Hoops
would buy it for their dogs because
it was cheaper than standard dog food.

Also, when they prepare a turtle
they build a fire on it while it's
just still alive, then peel and
open it up - then finish
cooking it.

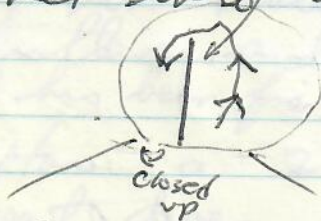
Had dinner at Bill's house - met his wife Linda.

1 SEPTEMBER 1982

WEDNESDAY

3rd
TIME out with
ED
(2nd to
pick up
turtles;
1st was to
set net)

UP at 4:30am - Bill picked me
up at ~ 5:30am. Bought 2 doz.
donuts at bakery and met Ed
at the dock. Depart ~ 5:50am
Heavy overcast - some dark clouds.
Motored outside the reef to off the
"house" - then cut in across
the reef. Found the get -
1 turtle present. Proceeded to
push one side of bag inward, and
then inserted a short section
of net into the bag. We formed



a line and stopped the water scaring
the fish all around to a smaller
area, at which time the inserted
piece was closed up. In addition
to the turtle, we caught ~ 5'
black-tipped shark (w/embryos), several
spotted rays with barbs, weke,
many papio, a very large ulua (~50 lbs),
small barracuda.

1 Turtle data as follows:

1 Sept 82
WEDNESDAY

Need calipers for Bill 85

6431^I LFC - Bent tag from Bill's metal box - didn't apply properly from his 5-19-82 taggings so it was left over. I read it as 6430, but later he pointed out to me that 6430 was recorded as applied 5-19, and that it was actually 6431 that was bent (see p.55). Facts of this matter are unknown, as I best remember this as tag 6430 ^{BARKER'S REMEMBERED IT WRONG} → Post Note (NO) 5/19/83 6430, 32, 35 (+6586) recovered 1/26/84 - read as 6430.

6387 RFL

C- 77.5 x 70

6388 2nd Scale L

6389 1st Scale R

Mostly clean shell, like others. Also, red juice flowed from mouth - like at least one of the other large turtles.

9/1/82

Palaau

77.5 (CL) x 70.0 (CW)

TAGS: 6431 & ~~6388~~ 6388 (LEFT FRONT FLIPPER)
6387 & 6389 (RIGHT FRONT FLIPPER)

^{9/0 Ed Medeiros}
 Smilie¹ knows of someone who
 has turtle as Anakua, but
 wouldn't say much about it.

DeVictoria
 Also - Byron's grandfather or Great-grand
 father (?) had turtle as "Anakua"
 because a turtle "saved his
 life" on the Big Island. He
 told everyone in his family not
 to eat turtle, but his father
 was "poor" so caught them
 anyway.

Sharks on beach have possibly
 some permanent residents. Also I
 transients took over one. "Rodney
 Cutchfield" sp? "satan worshippers, as per Byron"

Shark is "high protein" sea
 food - why not eat that?

Name of this Filipino net fishing,
 as listed in my booklet. Lat I,
 HMB?

Net fishing in this manner is
 hard work - most people on Molokai
 wouldn't want to do this.

1 September 1982

Wednesday

After emptying the net of fish - we straightened it out, leaving it where it is for a third day. Later, Ed said if he moves it, it will only be 100yds or so - reportedly, this would allow catching of fish that are not being gotten now (?).

We then set out for return to Kaurakabai, arriving at ~ 11am. Because of the low tide, (and lack of familiarity by Ed on what path to take) we hit a lot of coral heads and had to walk over much shallow ground. Near the slightly inland fishpond (near the new power plant), we saw a wooden boat with 4 (Fijians?) in it. I was told they were probably crabbing.

After arrival, Bill dropped me off at Pan Hara Inn where I cleaned up and checked out. Ate lunch at the Bakery.

Visited with Ed Medeiros to have him sign the PD paper. Told him
1. That I would send xerox maps

of Molokai coasting so he can
mark places fished, dates and
numbers of turtles caught; also
send return-addressed envelopes.

2. Sometime after October 2 I would
try to get him more money
for the purposes of letting Bill
go along and tag turtles;

Bill wants something like this to
do so he can "justify his
existence" here on Molokai -
tell something he is doing to the
community. He has gotten no
direction from superiors in the
Honolulu office.

Drove to Bill's office where I
met Leroy Nohia - he must
be a Hawaiian. He doesn't think
that the turtle remains I've seen
are the return of "accidental" net
captures. He only has 2 assistants.
"Game" on private property in
Hawaii is the property of the
land owners. They can make
their own rules on hunting.
However, they can call in
State DOA to enforce their
particular rules.

7 September 1982

WEDNESDAY

CeRoy had a high-speed chase with Walter Rette.

CeRoy was raised at Halawa up until the time he got married ~1950 and moved to the west end.

He knew of nesting (doesn't know species) at what I designate as Halawa #2 beach. He saw many hatchling close to shore. They used to take some for pets. He heard from his parents that the old Hawaiian used to lay palm fronds on the beach to tell where the turtle had laid. Reportedly they "cover their tracks" during return to the sea. Apparently they did this to take the eggs (my thought).

Bill mentioned a "Mickey McGuire" "1/2 Hawaiian" who used to catch a lot of turtles.

Member of a group of regular "poachers" (?)

Departed on Hawaiian Air Dash-7 at 7:10pm. only 2 aboard.

Took aerial photo of Palagan.

Arrived in Honolulu about 7:35pm.

9-7-82

TUESDAY

Telephone call from Bill Pukoo -
 He said that Ed only found
 one turtle in his net when
 he returned 9/2 Thursday morning.
 A very poor fish catch, so they
 moved the net to the east of
 the harbor. On Friday
 morning 9/3 Bill went with
 them and found ²³ turtles.
 Bill only had tags
 enough for 16 of them.
 Sizes ranged from 44cm - 80cm
 but the 80cm one wasn't
 tagged - too big to get onto
 boat. Only caught ~ 100 lbs of
 fish here, so the net was
 taken up and will be reset
 a Pukoo.

Sept. 7, 1982

George,

As per our telecon on 9/7, the following 16 turtles were tagged on
 Sept. 3rd at Palaau, just west of the house on stilts, in Mederios
 nets set in 4 to 8 feet of water:

<u>9-3-82</u>	(cm) curved length	(cm) curved width	tag on left flipper	tag on right flipper	2nd tag on right flipper
1.	44	39.5	6450	6449	- 0 -
2.	62	53.5	6448	6447	- 0 -
3.	53	48	6446	6390	- 0 - ENTRY NO. 2
4.	55	47	6391	6392	- 0 -
5. 10/3/85	56	49	6393	6394	- 0 -
6.	57	48.5	6395	6396	- 0 -
7. 9/19/86	57.5	51.5	6397	6398	- 0 - 6/4/87
8.	70.5	61.5	6399	6400	6401
9.	70.5	60.5	6402	6403	6404 ENTRY NO. 5
10.	74.5	63	6405	6406	6407
11.	72.5	63.5	6408	6409	6410
12.	74	63	6411	6412	6413
13. Recap 7/6/89	66.5	59.5	<u>6414</u>	<u>6415</u>	6416
14.	72.5	64	6417	6418	6419
15. Rec. 7-11-85 Palaav c = 68 cm	63	55.5	<u>6420</u>	<u>6421</u>	6422 <u>6/4/87</u>
16.	74	60.5	6423	6424	6425

Moderio
He will be resetting his nets in the Pukoo area on Wednesday. I'm planning on going out with him again on Thursday if more tags come in.

Aloha,

Brie

P.S. Seven more turtles were known to be in the nets. Five of them escaped under the lead line. Two of them avoided the cut-off netting and were left in the confines of the pocket when we left.

$$7 + 16 = 23$$

9-8-82 Telephoned Bill at home - 553-3778
 WEDNESDAY

ON Thursday night they had
 to take boat and anchor
 it - next day the trailer
 came down dirt road ~~near~~ through
 Molokai Ranch land.

He saw gillnetters - 2 boats
 by "house" - long nets. Believed
 to be Rawlins.

Molira remembers going with Pekele and
 seeing turtles leaving mud trails.

- KITA Fishing informed me that net
 measurement is normally eye-to-eye
 stretched. "Square mesh" is the
 length of one side.

Sold by lb & given in ft per lb.
 This is stretched length, i.e. hanging
 length is about half that.

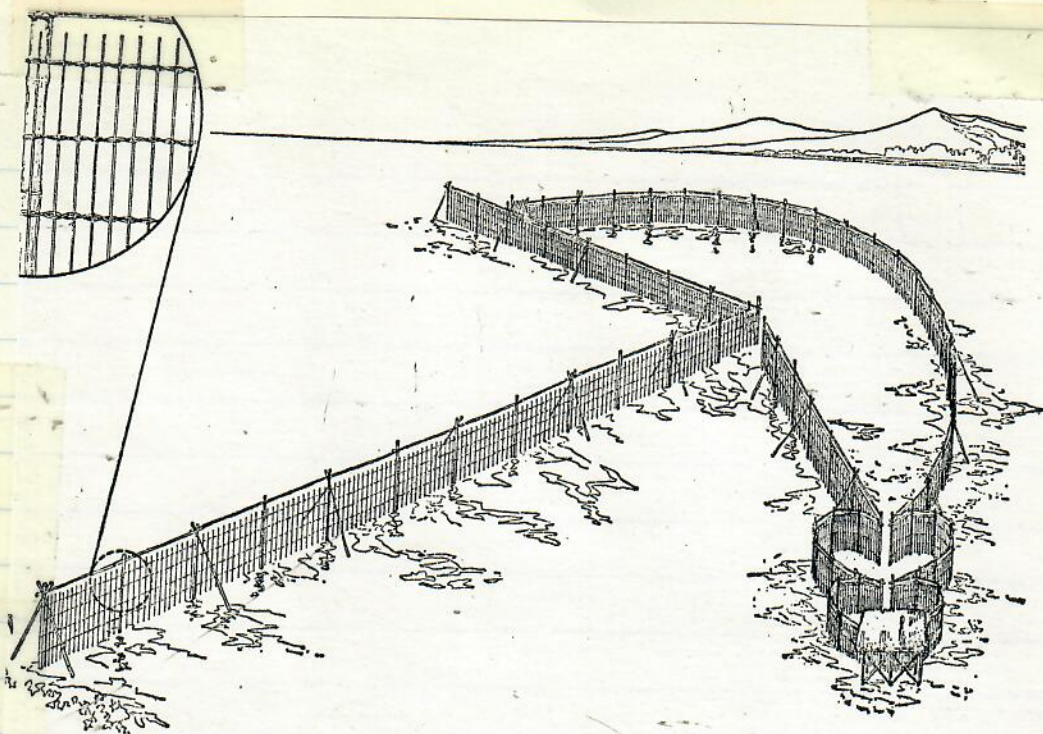


Figure 9.—Baklad (Tagalog), a typical fish corral set in the sea.

from - Guide to the classification of fishing gear
in the Philippines by A. F. UMALI
FWS Research Report 17; Gov. Printing D.C. 1950

- baklad** (Tagalog; Sambal; Kapampangan).—A set trap or corral of bamboo mattings or chicken wire arranged to form chambers. It has two wings generally with, but sometimes without, a long leader. It is designed as a guiding barrier with an intricate system of successive enclosures, which make entrance easy, but exit difficult. *Synonyms*: Bunuan (Sam. Bis.); sagkad (Bik.); pasabing (Ilk.); punot (Il. Bis.); bungsod (Seb. Bis.); bunsol (Sa.).
- baklad-alangan** (Tagalog).—A fish corral in Laguna de Bay which is set in the middle depths between the deep fish corrals and the very shallow ones.
- baklad-bakuod** (Batangas Tagalog).—A type of fish corral of the pangalato type having angular chambers. It was introduced into Balayan Bay by the Cavite fishermen. *Synonym*: Panggalato (Sam. Bis.; Bik.).
- baklad-balango** (Kapampangan).—A river fish corral with two wings and collecting cribs, but without a leader. *Synonyms*: Bunuhan (Tag.); abang (Tag.).
- baklad-bukana** (Batangas Tagalog).—A fish corral constructed near mouths of rivers in Batangas Province.
- baklad-gayarin** (Tagalog).—A fish corral in Manila Bay constructed in 9-fathom depth.
- baklad-gilid** (Tagalog).—A shallow-water fish corral in Manila Bay constructed about 50 yards from shore. In Laguna de Bay, the term refers to a corral with only one collecting pound. *Synonym*: Agila-baybayin (Tag.-Sp.).
- baklad-laot** (Tagalog).—A deep-water fish corral. In Laguna de Bay it is constructed in depths of 2 to 3 fathoms, and in Manila Bay, 3 to 9 fathoms.
- baklad-madalang** (Tagalog).—A fish corral in Bataan Province for catching larger species such as snappers, groupers, porgies, and cavallas. It is made with widely-spaced matting.
- baklad-malamba** (Tagalog).—A deep-water fish corral similar to baklad-laot (Tag.).
- baklad-malimit** (Tagalog).—A fish corral operated in Bataan Province for catching small fish such as anchovies and sardines. Narrowly-spaced mattings are used.

Sept. 13, 1982

George,

Only one turtle tagged on 9/10 at Pukoo.

curved length = 52 cm

curved width = 46 cm

tag right flipper = 6527

tag left flipper = 6526

Exact location = far out on reef breakers between Pukoo Harbor and Kupeke fishpond.

On 9/9 Mederios and crew went out to the nets and did not bag the fish as he did not think there was enough to merit the effort. However, he did notice that the nets contained four turtles of various sizes and left them in. The next day when we got out there the nets were laying down in parts/sections as the current and waves were very strong. We tried bagging but found it next to impossible because of the conditions. We did not catch any fish but I managed to secure one turtle swimming within the confine of the net. I think Mederios will be hanging up his operation for a while as it has been very unproductive. Furthermore, his nets were ripped pretty badly this last trip when we picked it up. He's now talking of gearing up for bottom fishing on his larger boat. I'll keep you in touch.

In regards to the last trip to Palaaau, Mederios told me that there were nine more turtles in the nets following the day we tagged the sixteen. He simply let them go.

All for now.

Becc

Date Tagged: Oct 19, 1982 PALAUU "A"
 Location Caught: Just west of Palauu house on stilts, Kahanui Pt.
 Method of Capture: Mederios Nets

Number	Curved Length (cm)	Curved Length (cm)	Tag Number On Left Front Flipper	Tag Number On Right Front Flipper
1	62 1/2 ^{78.0}	55 ^{width}	6533	6534. REC. 7/9/90
2	59	52 1/2	6535	6536
3 *	66	62	6537	6538
7/88 4 57.5	40 1/2	38 1/2	6539	6540
6/4/87 REC 5 *	46	41	6541	6542
6 **	72	63	6543	6544
7	58	48 1/2	6545	6546
8	47 1/2	41 1/2	6547	6548
9	83 1/2	75 1/2	6549	6550
10	79	72 1/2	6451	6452
11	75	71	6453	6454 ENTRY NO. 6
12	73	64	6455	6456
13	69	59	6457	6458
14	76	67	6459	6460
15	68 1/2 ^{83.0}	61 ^{75.5}	6461	6462 5/90
16	58	53	6463	6464
17 *	79 1/2	69 1/2	6465	6466
18	56 1/2	51	6467	6468

Remarks: * SEE ATTACHED SHEETS 1, 2, & 3

** Exceptionally Heavy Bodied

two of us to grab it and steer it to the boat and four of us to lift it aboard. Huge mother! (Actually it was huge father). Definitely male. If Rawlin's turtle weight 410 lbs., this guy must have weighed approximately 350 lbs. Strangley enough, we also picked up the smallest turtle to date on the same day.

Mederios mentioned something about setting again in the Palauu area maybe next week. Interested in coming over?

Date Tagged: Oct. 20, 1982

Location Caught: Just west of Palaaau house on piers (same ^{place} as) yesterday

Method of Capture: C. Mederios' nets

Date Tagged: October 26, 1982

Location Caught: Outside Kaopeahina fishpond, just east of Wavecrest Condos.

Method of Capture: E. Mederios Nets

Ualapue

Number	Curved Length	Curved Length (cm)	Tag Number On Left Front Flipper	Tag Number On Right Front Flipper
1*	45	40	6555	6556
2	58½	51	6557	6558
3	43½	36	6559	6560
4*	50	42½	6561	6562
* 10/5/26/82	45	40½	6563	6564
6	67	58½	6565	6566
7*	82½	78	6567	6568

East / 6/18/07 Nest / SCL 93.5 / CCL 98.0

***** TURTLES TAGGED ON MOLOKAI *****

Date Tagged: Oct 21, 1982

Location Caught: approximately 1,000 yards west of Kawaakohai

Method of Capture: E. Mederios' Nets Duck

Number	Curved Length (mm)	Curved Length (cm)	Tag Number On Left Front Flipper	Tag Number On Right Front Flipper
1	57½	49½	6553	6554

Remarks: * SEE ATTACHED SHEETS #1 & #2

* * RECOVERY FROM 9/3/82 !!!!

lift it aboard. Huge mother! (Actually it was huge father). Definitely male. If Rawlin's turtle weight 410 lbs., this guy must have weighed approximately 350 lbs. Strangley enough, we also picked up the smallest turtle to date on the same day.

Mederios mentioned something about setting again in the Palaaau area maybe next week. Interested in coming over?

16	81	63	6969	6464
17*	79 1/2	69 1/2	6465	6466
18	56 1/2	51	6467	6468

Remarks: * SEE ATTACHED SHEETS 1, 2, 3

** Exceptionally heavy bodies
 " " NEWBORN FROM 11/3/82!!!!

two of us to grab it and steer it to the boat and four of us to lift it aboard. Huge mother! (Actually it was huge father). Definitely male. If Rawlin's turtle weight 410 lbs., this guy must have weighed approximately 350 lbs. Strangley enough, we also picked up the smallest turtle to date on the same day.

Mederios mentioned something about setting again in the Palaaau area maybe next week. Interested in coming over?

Date Tagged: Jan 11, 1983

Location Caught: Kawela (just across Federal Wild/Waterbird Refuge)

Method of Capture: Mederios' nets

Number	Curved Length (cm)	Curved Width XXXXXX (cm)	Tag Number On Left Front Flipper	Tag Number On Right Front Flipper
1	40	35.5	6571 & 6573	6572
2*	92.5	88.5	6574	6575
3	55	47.5	6576	6577
4**	82.5	72	6578	6579

"Smallest tagged to date"

"largest tagged to date"

"Right PC chipped"

Sept. 21, 1982

George,

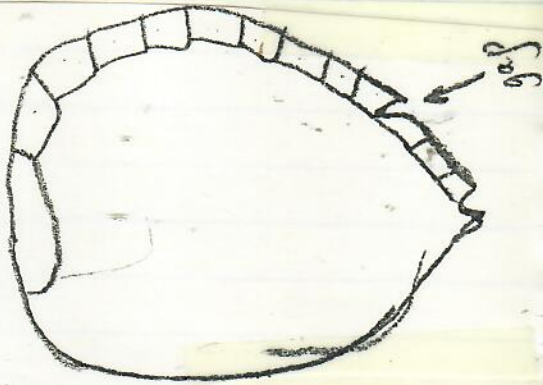
Two more turtles today. Both tagged on reef flats outside of Kaluaapuhi fishponds in Mederios' nets. Location just west of Kaunakakai Harbor.

curved length = 72 cm
curved width = 62 cm
tag right flipper = 6529
tag left flipper = 6528

curved length = 43 cm
curved width = 38.5 cm
tag right flipper = 6531
tag right flipper = 6532
tag left flipper = 6530

I decided to attached a second tag on the right flipper of the second turtle because I wasn't satisfied that the first one was secured as well as it could be. Also, on the right side of the smaller turtle there was a gap between side scales #9 & #10. It apparently ~~was~~ was damaged/hurt earlier but now it's completely healed.

I did not find the time appropriate to talk to Mederios about the cost and source of his nets. He was not exactly talkative as it was another scratch day for his operation. Not enough fish to even pay for the gas consumed. I'll be seeing him some-time again this week and if the timing is right, I'll ask him.



Jan. 14, 1983

Jan. 14, 1983

George,

Went out with Mederios on the 11th, 12th, and 13th of this month. Tagged all four turtles on the 11th. No turtles the next day. We moved the net about one half mile eastward on the 12th. No turtles the next day, the 13th.

One of the turtles was the largest we've tagged so far. It took two of us to grab it and steer it to the boat and four of us to lift it aboard. Huge mother! (Actually it was huge father). Definitely male. If Rawlin's turtle weight 410 lbs., this guy must have weighed approximately 350 lbs. Strangley enough, we also picked up the smallest turtle to date on the same day.

Mederios mentioned something about setting again in the Palau area maybe next week. Interested in coming over?

Date Tagged: Jan 11, 1983

Location Caught: Kawela (just across Federal Wild/Waterbird Refuge)

Method of Capture: Mederios' nets

Number	Curved Length (cm)	Curved Width XXXXXX (cm)	Tag Number On		
			Left Front Flipper	Right Front Flipper	
1	40	35.5	6571 & 6573	6572	"Smallest tagged to date"
2*	92.5	88.5	6574	6575	"Largest tagged to date"
3	55	47.5	6576	6577	
4**	82.5	72	6578	6579	"Right PC chipped"

***** TURTLES TAGGED ON MOLOKAI *****

***** TURTLES TAGGED ON MOLOKAI *****

Date Tagged: Jan. 14, 1983

Location Caught: Kawela, outside Panahaha Fishpond

Method of Capture: Mederios' Nets

Number	Curved Length (cm)	Curved width XXXXX (cm)	Tag Number On Left Front Flipper	Tag Number On Right Front Flipper
1	100	91	6580	6581

NO. 36- largest to date

Date Tagged: January 25, 1983

Location Caught: Kamalo, outside Kanukuawa Fishpond

Method of Capture: Mederios Nets

Number	Curved Length (cm)	Curved Width XXXXX (cm)	Tag Number On Left Front Flipper	Tag Number On Right Front Flipper
1	52	46.5	6582	6583
2	76	65	6584	6585

4.00m Barnacles that hatched off

Date Tagged: January 26, 1983

Location Caught: Kamalo, outside Kanukuawa Fishpond

Method of Capture: Mederios' Nets

<u>Number</u>	<u>Curved Length (cm)</u>	<u>Curved Width</u> XXXXXXXX (cm)	<u>Left Front Flipper</u>	<u>Right Front Flipper</u>
<u>1</u>	<u>66</u>	<u>58</u>	<u>6587</u>	<u>6588</u>
<u>2</u>	<u>39</u>	<u>36.5</u>	<u>6589</u>	<u>6590</u>
<u>3</u>	<u>48</u>	<u>41</u>	<u>6591</u>	<u>6592</u>

RECOVERIES***RECOVERIES***RECOVERIES***RECOVERIES***RECOVERIES

R2- 4

78.5

71

6432* 6586

6430/6435

R3- 5

48.5

43

6427

6426

*Barnacles
knocked off
Prior to release*

Animals 4 & 5 were tagged 8 months ago on 5/19/82 in just about the same area caught today. *On animal #4 another tag was attached to the left front flipper. The first tag had worn a hole in the flipper and it appeared ready to fall off soon. The new additional tag is number 6586.

***** TURTLES TAGGED ON MOLOKAI *****

Date Tagged: January 27, 1983

Location Caught: At mouth of Kamalo River, between Kamahuehue Fishpond

Method of Capture: Mederios' Nets & Kamalo harbor

<u>Number</u>	<u>Curved Length (cm)</u>	<u>Curved Width (cm)</u>	<u>Tag Number On Left Front Flipper</u>	<u>Tag Number On Right Front Flipper</u>
1*	44	40.5	6593	6594
2**	86	78	6595	6596

*chipped off
Right PC "*

*Deep scratch on 3rd
lat. right 58cm long
Deep Puncture 0.5cm
2nd lat Right "*

* See Attached Sheet #1

** See Attached Sheet #2

Remarks: Both animals had numerous barnacles on them, on top
and on their plastrons, and in the case of #2 even on
one of the rear flippers. All barnacles knocked off.

Date Tagged: January 28, 1983Location Caught: Mouth of Kamalo River, between Kamahuehue Fishpond and Kamalo HarborMethod of Capture: Mederios' nets

<u>Number</u>	<u>Curved Length (cm)</u>	<u>Curved Width XXXXXXXX (cm)</u>	<u>Tag Number On Left Front Flipper</u>	<u>Tag Number On Right Front Flipper</u>
<u>1</u>	<u>81</u>	<u>71</u>	<u>6597</u>	<u>6598</u>
<u>2*</u>	<u>39</u>	<u>37</u>	<u>6599</u>	<u>6600</u>

few barns - removed

P.S. chipped off ENTLEY NO. 11
last 2 v shapeDate Tagged: Feb. 8, 1983Location Caught: Between Puhaloa & Ualapue FishpondsMethod of Capture: Mederios' Nets

<u>Number</u>	<u>Curved Length</u>	<u>Curved Length (cm)</u>	<u>Tag Number On Left Front Flipper</u>	<u>Tag Number On Right Front Flipper</u>
<u>1*</u>	<u>75½</u>	<u>70</u>	<u>6601</u>	<u>6602</u>

***** TURTLES TAGGED ON MOLOKAI *****
 ***** TURTLES TAGGED ON MOLOKAI *****

Date Tagged: Feb. 26, 1983

Location Caught: Outside Panahaha Fishpond

Method of Capture: Mederios' Nets

<u>Number</u>	<u>Curved Length (cm)</u>	<u>Curved Width XXXXXXXX (cm)</u>	<u>Tag Number On Left Front Flipper</u>	<u>Tag Number On Right Front Flipper</u>
<u>1*</u>	<u>.77</u>	<u>71</u>	<u>6603</u>	<u>6604</u>
<u>2</u>	<u>43.5</u>	<u>38.5</u>	<u>6606</u>	<u>6605</u>

Date Tagged: = April 20, 1983

Location Caught: Between Pahomu and Kamahuehue Fishponds

Method of Capture: E. Mederios' Nets

<u>Number</u>	<u>Straight Length XXXXXXXX</u>	<u>Straight Width XXXXXXXX (cm)</u>	<u>Tag Number On Left Front Flipper</u>	<u>Tag Number On Right Front Flipper</u>
<u>1</u>	<u>54</u>	<u>43.5</u>	<u>6607</u>	<u>6608</u>
<u>2*</u>	<u>56.5</u>	<u>47</u>	<u>6609</u>	<u>6611</u>
<u>3**</u>	<u>45.5</u>	<u>37</u>	<u>6427</u>	<u>6426</u>

48.5 Curved → 43 Curved

R4
RECOVERY

Remarks: 2*) See Attached Sheet Number 1

3**) Recovery from May 19 1982, same area!

Finally got to use calipers. Enclosed data for two additional turtles, and one recovery.

Regarding turtle number two, left rear flipper missing. Congenital defect. Stump is scaled on the end.

Mederios definitely will be terminating his "bullpen" fishing. DOCARE did a research on past records to see if anyone had ever been busted for "bullpen" violations under current statutes. Discovered that in 1950, game warden here on Molokai did arrest a man for using a bullpen setup. Court at that time got/secured an opinion as to the definition of "trap" and charged fisherman for violation of "trap" dimensions, i.e. bullpen was considered a trap and therefore it must comply to trap requirements. The fisherman was finally convicted in 1955.

→ DOCARE on Molokai was asked to enforce "trap" regulations and Molléna contacted Mederios to explain the situation. Mederios agreed to suspend "bullpen" and said he will be fishing with another method. May be the end of our goldmine.

Date Tagged: June 30, 1983

Location Caught: Kawela, outside Kakaia Fishpond

Method of Capture: Nets of local fisherman - (Mederios)

Number	Straight Length (cm)	Straight Width (cm)	Tag Number On Left Front Flipper	Tag Number On Right Front Flipper
1* ^{Barnacles} removed	41.0	34.5	6624	6625
2** ^{see attached sheet}	63.0	48.5	6626	6627

From Bill
5-2-83

Glenn
Recovery

17 MARCH 83

Thursday

Lin, Christian and I flew to Molokai for vacation - 17th at Pau Hana Inn; 18th at Hotel Molokai. Drove to Palanipapa lookout; ORCA shrimp project, and Halawa valley. Main beach at latter was steep cut - no sign of nesting; lots of debris. noted dog prints; also Jeep tracks on beach #2. Dropped caliper off at Bill's house, but didn't see him.

Date Tagged: May 6, 1983Location Caught: Outside Kanukuawa FishpondMethod of Capture: Mederios' Nets

Number	Straight XXXXXX Length	Straight XXXXXX Width XXXXXX (cm)	Tag Number On Left Front Flipper	Tag Number On Right Front Flipper
1	61	50	6609/6612	6613
2	43.5	37	6614	6615
3	56.5	44.5	6616	6617
4	41	33	6618	6619

~~3* Present -~~
~~Attached opp~~
 *****RECOVERY*****RECOVERY*****RECOVERY*****RECOVERY*****

RS 5 72
 ? 77.0

55.5
67.0

curved measurements

This animal was originally tagged on Jan. 25, 1983
 and caught in the same general area.

***** TURTLES TAGGED ON MOLOKAI *****

Date Tagged: June 4, 1983 (Saturday)

Location Caught: Ualapue, (outside Wavecrest)

Method of Capture: Incidental catch in gill nets (Mederies)

Number	XXXXXX Straight Length (cm)	XXXXXX Straight Width (cm)	Tag Number On Left Front Flipper	Tag Number On Right Front Flipper
1	71	59	6620	6621
2*	67	52	6622	6623

Barnacles were attached to this animal and were removed prior to release. Two more larger turtles were within the confines of the nets but were not captured for tagging.

Date Tagged: July 1, 1983

Location Caught: Kawela, Outside Kakaia Fishpond

Method of Capture: Nets of Local fisherman (Mederies)

<u>Number</u>	<u>Straight XXXXXXXX Length (cm)</u>	<u>Straight XXXXXXXX Width XXXXXXXX (cm)</u>	<u>Tag Number On Left Front Flipper</u>	<u>Tag Number On Right Front Flipper</u>
1* ^{Barnacles} removed	69.5	53.0	6628	6629
2	47.0	38.0	6630	6631
3	48.5	39.5	6632	6633
4	55.0	43.0	6634	6635
5	78.0	62.0	6636	6637
6	76.5	65.5	6638	6639

Date Tagged: July 7, 1983

Location Caught: Makolelau, Outside Kanukuawa Fishpond

Method of Capture: Fisherman's Nets

Number	Curved XXXXXXXX Length (cm)	Width Curved Length (cm)	Tag Number On	
			Left Front Flipper	Right Front Flipper
1	52.5 <i>Rec'd 1/8 2/5/83</i>	47.0	6640	6641
	47.0	38.5	straight measurements	
2	48.0	43.0	6642	6643
	45.5	36.5	straight measurements	
3	47.5	42.0	6644	6645
	44.5	36.0	straight measurements	
4	52.0	47.0	6646	6647
	48.5	38.5	straight measurements	

ENTRY NO. 9

"Totals to date, 99 tagged, 6 recoveries" as per Bill's letter dated 7-8-83

Note - This includes the tags given to him pfs from the mortality recovery

Date Tagged: September 6, 1983

Location Caught: Outside Pahiomu Fishpond

Method of Capture: Fisherman's nets

<u>Number</u>	<u>Curved Length (cm)</u>	<u>Curved WIDTH xxxxx (cm)</u>	<u>Tag Number On Left Front Flipper</u>	<u>Tag Number On Right Front Flipper</u>
<u>1</u>	<u>47.5</u>	<u>46.0</u>	<u>6648</u>	<u>6649</u>
<u> </u>	<u>44.5</u>	<u>40.0</u>	<u> </u>	<u> </u>

→ 44.5 ← 40.0 ←
straight measurements

Date Tagged: Sept. 7, 1983

Location Caught: Outside Panahaha Fishpond

Method of Capture: Fisherman's Nets

<u>Number</u>	<u>Curved Width xxxxx (cm)</u>	<u>Curved Length (cm)</u>	<u>Tag Number On Left Front Flipper</u>	<u>Tag Number On Right Front Flipper</u>
<u>1</u>	<u>54.0</u>	<u>62.0</u>	<u>6650</u>	<u>7276</u>
<u> </u>	<u>45.5</u>	<u>57.5</u>	<u> </u>	<u> </u>

→ 45.5 ← 57.5 ←
straight measurements

ENTRY NO. 8

Date Tagged: Nov. 1, 1983

Location Caught: Palaau, Molokai

Method of Capture: Nets

Medeiros net

*Released
- Pawaatakai pier*

<u>Number</u>	<u>Curved Length (cm)</u>	<u>Curved Width XXXXXX (cm)</u>	<u>Tag Number On Left Front Flipper</u>	<u>Tag Number On Right Front Flipper</u>
<u>1</u>	<u>76.0</u>	<u>69.0</u>	<u>7277</u>	<u>7278</u>
	<u>70.0</u>	<u>56.0</u>		

straight measurements (with arrows pointing to 70.0 and 56.0)

(Shell-chipped to 77 post central)

Date Tagged: Nov. 16, 1983

Location Caught: Kipapa Fishpond, Molokai

Method of Capture: Nets

<u>Number</u>	<u>Curved Length (cm)</u>	<u>Curved Width XXXXXX (cm)</u>	<u>Tag Number On Left Front Flipper</u>	<u>Tag Number On Right Front Flipper</u>
<u>1</u>	<u>55.0</u>	<u>48.5</u>	<u>7279</u>	<u>7280</u>
	<u>51.5</u>	<u>41.5</u>		

straight measurements (with arrows pointing to 51.5 and 41.5)

Date Tagged: Nov. 17, 1983

Location Caught: Outside Kakahaia Fishpond

Method of Capture: Nets

<u>Number</u>	<u>Curved Length (cm)</u>	<u>Curved Width XXXXX (cm)</u>	<u>Tag Number On Left Front Flipper</u>	<u>Tag Number On Right Front Flipper</u>
<u>1</u>	<u>56.5</u>	<u>49.0</u>	<u>7281</u>	<u>7282</u>
<u> </u>	<u>52.0</u>	<u>43.0</u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u>2</u>	<u>48.0</u>	<u>45.0</u>	<u>7283</u>	<u>7284</u>
<u> </u>	<u>44.5</u>	<u>38.0</u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

Remarks: Number of turtles tagged to date: 105

Number of recoveries to date: 6

TURTLES TAGGED ON MOLOKAI *****

Date Tagged: Dec. 17, 1983

Location Caught: Outside Kanukuawa Fishpond

Method of Capture: Nets

<u>Number</u>	<u>Curved Length (cm)</u>	<u>Curved Width (cm)</u>	<u>Tag Number On Left Front Flipper</u>	<u>Tag Number On Right Front Flipper</u>
<u>1</u>	<u>53.0</u>	<u>46.5</u>	<u>7285</u>	<u>7286</u>
<u> </u>	<u>49.0</u>	<u>41.5</u>	<u> </u>	<u> </u>

→ straight measurements ←

Remarks: Right rear flipper torn. See attached drawing/page.
106 tagged to date with 6 recoveries.

Barnacles on animal were knocked off prior to release.

Date Tagged: December 20, 1983

Location Caught: Palaau, Outside Pakanaka Fishpond

Method of Capture: Nets

Number	Curved Length (cm)	Curved Width XXXXXX (cm)	Tag Number On Left Front Flipper	Tag Number On Right Front Flipper
1	48.0(44.5)	43.0(36.0)	7287	7288
2	49.0(46.0)	42.0(35.0)	7289	7290
3*	47.5(45.0)	42.0(37.5)	7291	7292
4**	46.0(43.0)	42.0(36.5)	7293	7294
5	49.0(46.0)	43.0(37.0)	7295	7296
6***	45.0(36.5)	42.0(33.0)	7297	7298
7	85.0(79.0)	77.5(62.0)	7299	7300

Remarks: Numbers in parenthesis represent straight measurements.

Five more turtles with tags attached were seen in the nets today but were not boated. 113 tagged to date with 6 recoveries.

NOTE 7276-7350 (75) set 7-8-83

See p.114

SL 40 cub in 12 yr lmo = 3.3 cm/yr

2-7-96 Dead - Photos wavecrest Resort (Ohio, Molekai) entangled in trawl net debris

SL = 83.0
CC = 90.0

Recovered 3-5-86

February 7, 1996

George,

You've probably gotten wind of this episode by now. Cross out number ~~7293/7294~~ from our database. DOA in front of Wavecrest Resort (Ohaia, Molokai). Her right front flipper was entangled in a piece of cargo net, which I suspect led to her demise. Except for a large tumor at the cloaca, she was in very good shape. She appeared to be very robust (or maybe just bloated from being died for a couple of days). The tumor (a #3) was not of the type we're accustomed to seeing. It was internal, not the baggy type commonly seen. Being internal, it caused the area beneath the tail to be unusually swollen. The skin was not broken. Outside of this deformity, everything else appeared to be normal. My best guess is that the cargo net must have gotten entangled on coral while foraging causing her to drown. Too bad...she was an old friend. Originally tagged on Dec. 20, 1983 at Palaau and later recovered on March 5, 1986. Both incidents occurred at Palaau "A". This was one of the few eastward recapture we've experienced so far. Since our initial encounter she was able to double her size. The cargo net was removed and she was towed back to her final resting place in the reef offshore. Pictures taken.

Trawl
net
debris

Date	Straight Length	Curved Length	Straight Width	Curved Width
12/20/83	⁴³ 44.5 cm	⁴⁶ 48.0 cm	36.0 cm ^{36.5}	43.0 cm ⁴²
3/5/86	49.5 cm	52.5	42.0 cm	48.0 cm
2/7/96	83.0 cm	90.0 cm	66.0 cm	90.0 cm

SL 83-43 = 40 cm CL 90-46 = 44 cm

in 12 yrs
1 month

3.7 cm/yr

Best regards,

cc J. Illgen

3.3 cm/yr

Pace

* * * * * TURTLES TAGGED ON MOLOKAI * * * * *

Island Weather

Kauai, Oahu, Molokai, Lanai, Maui—Partly fair, a few passing showers.
 Hawaii—Windward Kohala to Puna occasional

showers. Kona and Ka'u afternoon and evening showers over slopes, partly sunny morning.
 Gusty tradewinds all islands 15-30 mph.

Sea and Sky

August

HONOLULU TIDES			
DAY	HIGH TIME	HT.	LOW TIME
MONDAY			
1	1:38 a.m.	0.9	6:54 a.m.
	2:16 p.m.	2.1	9:23 p.m.
TUES.			
1	2:19 a.m.	0.9	7:38 a.m.
	2:51 p.m.	2.2	9:48 p.m.
2	2:56 a.m.	1.0	8:18 a.m.
	3:23 p.m.	2.2	10:13 p.m.
3	3:28 a.m.	1.1	9:00 a.m.
	3:53 p.m.	2.1	10:38 p.m.
4	4:03 a.m.	1.2	9:39 a.m.
	4:22 p.m.	2.1	11:00 p.m.
5	4:42 a.m.	1.3	10:21 a.m.
	4:51 p.m.	1.9	11:25 p.m.

5	5:23 a.m.	1.4	11:04 a.m.	0.4
	5:22 p.m.	1.8	11:49 p.m.	0.2
6	6:06 a.m.	1.6	11:59 a.m.	0.5
	5:54 p.m.	1.6		
7	6:58 a.m.	1.6	12:18 a.m.	0.2
	6:29 p.m.	1.4	1:02 p.m.	0.6
8	7:57 a.m.	1.7	12:55 a.m.	0.2
	7:15 p.m.	1.1	2:30 p.m.	0.7
9	9:10 a.m.	1.8	1:36 a.m.	0.2
	8:17 p.m.	0.9	4:22 p.m.	0.7
10	10:29 a.m.	2.0	2:29 a.m.	0.3
	10:00 p.m.	0.8	6:12 p.m.	0.6

TIDES ELSEWHERE
 The table below compares times of high and low tide with those listed for Honolulu Harbor.

	High	Low	Time
Haleiwa	1 04	2 08	earlier
Hanaie	1 30	1 50	earlier
Hanauma	1 01	0 48	earlier
Hilo	1 01	0 56	earlier
Honauapo	0 28	0 25	earlier
Kailua-Kona	0 28	0 25	earlier
Kaneohe	1 48	1 42	earlier
Kahului	1 53	1 42	earlier
Kaunakakai	0 02	0 02	earlier
Kawaihae	0 02	0 02	later
Kealahou	0 37	0 43	earlier
Lahaina	0 37	0 43	earlier
Laie Bay	0 37	1 49	earlier
Mahalea	0 03	0 25	earlier
Mahukona	0 28	0 20	earlier
Nawiliwili	0 28	0 20	earlier
Waianae	0 18	0 15	later
Waimanalo	1 17	1 12	earlier

MOON PHASES: Full moon: Sep. 3;
 Last quarter: Sep. 10; New moon:
 Sep. 17; First quarter: Sep. 25; Full
 moon: Oct. 3; Last quarter: Oct. 9;
 New moon: Oct. 17; First quarter:
 Oct. 25.

For the latest National Oceanic and Atmospheric Administration record forecast for Honolulu, call 836-0234; for Oahu, 836-0121; for surf, 836-1952; for Hawaiian waters, 836-3921.

* * * * * TURTLES TAGGED ON MOLOKAI * * * * *

- PHOTO LOG -

FILM DATES - SUBJECT

ASA 64 1980 / 12/28^{TUES.} Coastline & helicopters w/ kab; ^{12/3 wed} bathered turtle
 parts; ^{12/4 Thurs.} Halawa WA & 50mm; Euphorbia;
 Moomoani beach; ^{12/5 Friday} Pholix Stone - Palaau; Kalapapa look

ASA 64 1982 / 8/24/82 - Nest of leatherback; Russ Doan
 & coastline photos

ASA 64 1982 / 8/27^{Friday} continuing same roll as above -

8/28 Halawa Beach; Moku Papapa out Molo kai.

8/29 Sun Rotting turtles / KACUMAVLA LAND fill

8/30 Mon Setting wet at Palaau; tog 6376, 6377;

8/31 TUES. Picking up net; turtles - 6378-79; then 6382-84;

Pulling in fish; Boat taken by me in the water; Pakai;
 9/1 Palaau from departing airplane

~~DRAFT~~

Turtle Rec. on #132

NATIONAL MARINE FISHERIES SERVICE
HONOLULU LABORATORY
P. O. BOX 3830
HONOLULU, HAWAII 96812

Recovery records of green tur
south shore of Molokai

Compiled by G

Entry No.	Tag No.	Date tagged and location	Carapace measurements (cm) ₁	Location released
1.	6390, 6446	9/3/82 Palaau	C 53 x 48	SAME --
2.	6430, 6432, 6435	5/19/82 Kamalo	C 76.2 = 75.0 cm! NOT	same
3.	6426, 6427	5/19/82 Kamalo	C 45.7 = 45.0 cm	same
	6426, 6427			
4.	6584, 6585	1/25/83 Kamalo, Kanukuawa fspd.	C 76 x 65	--
5.	6402, 6403 6404	9/3/82 Palaau	C 70.5 x 60.5	--
6.	6453, 6454	10/19/82 Palaau	C 75 x 71	--
7.	7335, 7336	2/11/84 Palaau	C 55 x 49.5	Kaunakakai Dock
8.	6650, 7276	9/7/83 Panahaha fspd.	C 62.0 x 54.0 S 57.5 x 45.5	--
9.	6644, 6645	7/7/83 Makolelau, Kanukuawa fspd.	C 47.5 x 42.0 S 44.5 x 36.0	--
	6644, 6645			Kakahaia
10.	6686, 6687	4/13/84 Kakahaia fspd.	C 64.5 x 58.0 S 60.5 x 47.5	Kakahaia

7-5-84 Bill - please look this over and offer comments, corrections, "fill-in-the-blanks", etc.
George

tles tagged in foraging pastures along the
by Bill Puleloa and Edward Mederios.

George H. Balazs, June 1984.

Date recovered and location	Carapace measurements (cm)	Interval in months	Increase in carapace measurements (cm)	Increase in carapace length in cm/year
10/20/82 (47 days) Palaau	C 53 x 48	(1.6) = 1.5	C 0 x 0	C 0
1/26/83 (36 wks) Kamalo	C 78.5 x 71	(8.2) = 8.3	C (2.3) = 3.5	C (3.4) = 5.1
1/26/83 Kamalo	C 48.5 x 43	(8.2) = 8.3	C (2.8) = 3.5	C (4.1) = 5.1
4/20/83 (12 wks) Kamalo (Pahiomu & Kamahuehue) Fishpd.	C 48.5 x 43 S 45.5 x 37	2.8	C 0	C 0
5/6/83 (101 days) Kanukuawa Fishpd.	C 77.0 x 67.0 S 72 x 55.5	(3.4) = 3.3	C 1.0 x 2.0	C (3.5) = 3.6
2/8/84 (523 days) Palaau	C 72.0 x 64.0 S 67.5 x 55.5	17.2	C 1.5 x 3.5	C 1.0
2/11/84 (480 days) Palaau	C 76.5 x 72.0 S 71.5 x 57.5	(15.7) 15.8	C 1.5 x 1.0	C 1.1
3/24/84 (92 days) Palaau	C 54.6 x 49.5	1.4	C -0.4 x 0	C -3.4
4/12/84 (218 days) Kakahaia Fishpd.	C 63.0 x 56.5 S 58.5 x 47.0	7.2	C 1.0 x 2.5 S 1.0 x 1.5	C 1.7 S = (C) 1.7
4/13/84 (281 days) Kakahaia Fishpd.	C 52.5 x 45.5 S 48.5 x 39.0	9.2	C 5.0 x 3.5 S 4.0 x 3.0	C 6.5 S 5.2
4/14/84 Kakahaia	--	1 day	--	--
4/14/84 Kakahaia	--	1 day	--	--

NOTE: THESE MEASUREMENTS were taken by E. MEDERIOS & reported AS 21 1/2" and 19 1/2" respectively. IN ALL probability, he did not measure over the same two points I did originally AND thus the great discrepancy in growth rate.

Continued.

Entry No.	Tag No.	Date tagged and location	Carapace measurements (cm) ₁	Location released
11.	6599, 6600	1/28/83 Kamalo River Kamahuehue- Kewalo Harbor	C 39 x 37	--

¹C = curved carapace length times curved carapace width;

12.	6465, 6466	10/19/82 Palaan	C 79.5 x 69.5	(same)
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13.	7329, 7330	2/8/84 Palaan	C 63.5 x 57.0 S 59.0 x 48.5	K'KA' Duck
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Sept. 11, 1984

George,

I FINALLY got around to working on this! As you can see in entries 2 and 3, I've used the original raw data for the reported measurements to you, I converted them to metrics...and thus a larger discrepancy.

I also took the liberty of adding the last two records from last year. You probably want to double check my figures.

When we were over on the Big Island this past July to check out the area. It was pretty rough the day that you managed to catch turtles there! Only a few would try to work in that kind of water. Mo' easy.

It's been a little while since I last wrote. Lots to do in one place, the more you can find to do. Better than

Ed's definitely out of business now. Pekelo et al recently passed regulations. Ed is now back from Kaula gill netting. I hope to go with him a couple of times for something else! Big eye, long, doubled. I think that

Date recovered and location	Carapace measurements (cm)	Interval in months	Increase in carapace measurements (cm)	Increase in carapace length in cm/year
4/25/84 (453 days) Palaau	C 44.5 x 41.0 S 41.5 x 34.5	14.9	C 5.5 x 4.0	C 4.4

S = straight carapace length times straight carapace width.

5/16/84 (515 days) Palaau	C 82.0 x 71.5 S 76.5 x 60.0	18.9	C 2.5 x 2.0	C 1.6
5/16/84 (98 days) Palaau	C 64.0 x 57.0 S 59.5 x 48.5	3.2	C 0.5 x 0.0 S 0.5 x 0.0	C 1.9

As you can see, I've "corrected" a couple of figures. In regards to the carapace measurements from my field book. When I went from metric to inches and you had now re-converted back

series (entries 12 & 13) which were recorded in May of this

for a vacation, I made it a point to drive down to Punaluu. I look at it and wondered if it was normal and how an exceptionally dedicated researcher (or a complete idiot) catch honu on Molokai!

of stuff to do now-a-days. I guess the longer you stay at sea way. Keeps me out of trouble.

have decreed that Ed's operation is definitely contrary to the law (pau work there) and has told me he is gearing up to come here to see how this will affect turtles. His new net is here is a chance turtles can get hooked up.

2"
ability,
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spancy
rate.

GEORGE H. BALAZS
 ZOOLOGIST
 MARINE MAMMALS AND
 ENDANGERED SPECIES PROGRAM



MEMBER, IUCN MARINE TURTLE SPECIALIST GROUP

NATIONAL MARINE FISHERIES SERVICE
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METRIC SYSTEM WITH U.S. EQUIVALENTS

METRIC UNIT (1) U.S. EQUIVALENT

LENGTH

millimeter	(mm)	0.04 inches
centimeter	(cm)	0.39 inches
decimeter	(dm)	3.94 inches
meter	(m)	39.37 inches
decameter	(Dm)	32.81 feet
hectometer	(hm)	109.36 yards
kilometer	(km)	0.62 miles
myriameter		6.2 miles

AREA

square centimeter	(cm ²)	0.155 sq. inches
square meter	(m ²)	1.196 sq. yards
are	(a)	119.60 sq. yards
hectare	(ha)	2.47 acres
sq. kilometer	(km ²)	0.3861 sq. miles

WEIGHT

milligram	(mg)	0.015 grains
centigram	(cg)	0.154 grains
decigram	(dg)	1.1543 grains
gram	(g)	0.035 ounces
decagram	(Dg)	0.353 ounces
hectogram	(hg)	3.527 ounces
kilogram	(kg)	2.2046 pounds
quintal		220.46 pounds
metric ton		1.1 tons

METRIC UNIT (1) U.S. EQUIVALENT

VOLUME

cubic centimeter	(cm ³)	0.061 cubic inches
cubic decimeter	(dm ³)	0.0353 cubic feet
cubic meter	(m ³)	1.31 cubic yards
cubic decameter	(Dm ³)	13.10 cubic yards

CAPACITY, CUBIC

milliliter	(ml)	0.06 cubic inches
centiliter	(cl)	0.6 cubic inches
deciliter	(dl)	6.1 cubic inches
liter	(l)	61.02 cubic inches
decaliter	(Dl)	0.35 cubic feet
hectoliter	(hl)	3.53 cubic feet
kiloliter		1.31 cubic yards

CAPACITY, DRY

deciliter	(dl)	0.18 pints
liter	(l)	0.908 quarts
decaliter	(Dl)	1.14 pecks
hectoliter	(h)	2.84 bushels

CAPACITY, LIQUID

milliliter		0.27 fluidrams
centiliter		0.338 fluidounces
deciliter		0.21 pints
liter		1.057 quarts
decaliter		2.64 gallons

***** THURTEEN PAGES OF HISTORY *****