

J. F. Lynch
1984

9 OCT

Trip to Mexico to: 1) study behavioral ecology of Hooded and Kentucky Warblers in P. Roo;
2) collect Pseudoeurycea in Chiapas & Oaxaca
3) work on WWF-US project studying effects of agricultural practices on migratory birds

En route Washington - Puerto Morelos

Left National airport at 07:25 on Eastern flight to New Orleans; Transferred there (after 2 1/2 hr. layover) on to Eastern's flight to Cancun. For this first 3-week portion of my 8-week trip to Mexico, I will be working with Gene Marton, Gene's assistant Kim Young, and Patricia Mehlhop. We will be based at Puerto Morelos, about 20 mi S. of Cancun, and will be focusing on foraging behavior, habitat associations, and social interactions (especially σ - ϕ) in Hooded Warblers and (to a lesser extent) Kentucky Warblers. First priority is to find a convenient study site where both σ and ϕ HOWA occur.

We arrived in Cancun at 12:15 P.M. local time (Central Standard - 2 hrs. behind Washington EDT). We were met by Laurie Greenberg, who has been in Puerto Morelos and Mexico City for the last 3 months, studying Spanish and checking out research possibilities for her Ph.D. ~~re~~ program in Geography at U. of Maryland. I had reserved a station wagon from Hertz, but all they had was a new Dodge Aries (700 km on the odometer). Quite cramped, but at least it has air conditioning.

Enrique Carillo - new CIPRO director

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Puerto Morelos - cont'd

9 Oct
(cont'd)

We drove to Puerto Morelos and set up in 2 rooms at the hotel "La Ceiba" at the north end of town. With the continuing devaluation of the Mexican peso (now about 195 to the dollar), the rooms are renting for about \$30⁰⁰ a day. We got a 20% discount, and ended up paying about \$25⁰⁰/night, down from more than \$30⁰⁰ (incl. discount) last January-February.

I was feeling pretty lousy - as if a flu attack were impending, so turned in early.

10 Oct.

Vallarta Rd, west of Puerto Morelos, Q. Roo

After a very unpleasant mosquito-infested night (our screen door wouldn't shut tightly), we arose at 05:30, and were out by 06:15. (Note: at this time of year, Dawn is up by 05:00 or 05:15). Weather sunny and mild. Much standing water in aguadas, but no signs of recent heavy precipitation - probably about "normal" conditions for this time of year.

We drove half a Km S. of the Pto. Morelos exit off Mex Hwy 307, then turned W. on road to Vallarta. Spent about 1/2 hours checking out 2nd growth vegetation

— C. M. M. M.
C. M. M. M.

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Puerto Morelos Area - Cont'd

10 Oct
(cont'd)

around the large abandoned limestone quarry just W. of the JCT with Hwy 307. Lots of low, dense, shrubby habitat that looked good for ♀ HOWA, but all we could find were 4 ♂♂ - all in low-to-medium stature woodland, rather than the ciperuz scrub-forest. Birds generally quite active. We saw the following, all in scrub to forest edge habitat:

Roadside Hawk, Vaux Swift, Buff-breasted Hummingbird, Belted Kingfisher, Little Blue Heron, Green Heron (lost 3 spp around flooded areas at bottom of quarry), Social Flycatcher, Boat-billed PC, Kiskadee, Dusky-capped PC, Northern Beardless Tyrannulet, Amazon Parakeet, Lesser Greenlet, Yucatan Vireo, Red-eyed Vireo, * Scrub Vireo, White-eyed Vireo, Blue-gray Gnatcatcher, Black-and-white W. Palm Warbler, Hooded Warbler, Ovenbird, Magnolia Warbler, American Redstart, Chestnut-billed Warbler*, Bright-rumped Attila, Rose-throated Tanager, Red-throated Ant-tanager, Yellow-backed Oriole, Golden-fronted Woodpecker, Carolina Wren, Spot-breasted Wren, White-bellied Wren, Rufous-browed Peppershrike, Red-billed Pigeon, Rose-throated Becard, Thick-billed Euphonia, Turkey Vulture.
* Gene saw these

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Brown Jay, Yucatan Jay, Plain Chachalaca.

10 Oct.

a mixed flock contained several Lesser greenlets, 2 MAWA, ad ♂ AMRE, at least 1 WEV, at least one Scrub Vireo, Black-and-white warbler, and a red-eyed Vireo (gene seen).

We drove another 2 km or so west to a point ca. 1.5 km W. of the Jo. of the Vallarta Rd + Mex hwy 307. This is an area of long, narrow N-S oriented aguadas interspersed with dry forest. We had first checked out this area a couple of years ago (January 1982), when the water holes were dry, and were occupied (in part) by ♀ HOWA. Now there were no Hoodeds except in dry forest. Margins of aguadas, aggressively protected by Northern Waterthrushes (several seen). We finally found a lone ♀ HOWA in a fairly scrubby area surrounded by intact forest (and ♂ Hoodeds). After going back to the hotel to get tape recorder and playback tape, we tried to net as many of these Hoodeds as possible. Ended up catching the ♀ and 3 ♂♂ in an area of ~ 1/2 km of trails. Added bonuses: got a Swainson's Warbler and a Worm-eating Warbler each in the same net with a ♂ Hooded (about 100 m - 125 m apart).

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These 2 (as well as ♀ Hooded and 2 of the ♂♂) were photographed by Pat, and given aluminum FWS bands and (for Howa only) a color band. The Wever was extremely ^{more} feisty and aggressive than either the Saino's or Howa.

11 Oct.

Back out in the same area, ~ 1.5 km W. of Oct. with Mex 307 on Vallarta Rd. Weather cloudy and muggy - rained intermittently during morning - sometimes quite intense. Pat & I walked out on the ~~road~~ NE-trending trail, flagging it every 50m and looking for Hooded Wevers to band. We flagged the trail for 500m, almost all of it through dense forest. We needed a male Hooded almost at the 500m mark (~ 485m). Then turned S. and flagged a trail all the way to the highway, which turned out to be about 400m. We crossed through (or next to) several tinzales (mostly dry), but saw no ♀ Hoodeds.

Left area for lunch at ~ 1330 hrs; Returned at 1630 and spent an hour or so exploring the scrubby woods S. of the Vallarta Rd, just W. of where

we worked in the morning. Pat and I found 2 mole-like egg HOWA (Class 3 and Class 5 or 6), while Gene & Kim found two "typical" gg (Class 0 or 1), all in an area of a few hectares of Palo blanco-scrub with flooded areas. Lots of light getting through - grasses and sedges conspicuous in understory.

12 Oct

Returned to same area we visited yesterday P.M. - saw the Class 5-6 female, but couldn't net her. Birds responding very weakly (or not at all) today - maybe the weather is to blame - when we left the hotel at 8:00, it was already warm, sunny, and humid - kind of oppressive.

Pat & I spent a couple of hrs. trying unsuccessfully to net gg S. of the Vallarta rd, then returned to the N-S trail we'd cut yesterday, a few hundred meters E. of the finch area. We worked our way from the road northward, cutting the trail, doing playback, and trying to net birds where possible. We stopped for a playback every 50m, and saw a ♂ Hooded at every stop except

J. Flycatcher
1984

Pro-Movelos area - cont'd

12 Oct
(cont'd)

The first and the last 2 (where we had a banded bird yesterday), Conclusion: Hooded Warblers are thick in this forest. We had no luck netting - one bird was briefly caught alongside a hutale, but escaped before I could grab it. Others seemed very elusive, as compared with the usual situation. Migrants common - we netted a Worm-eating Warbler, a Blue-winged Warbler, a Northern Water Thrush, an Ovenbird, and a Black-and-white Warbler, and observed White-eyed Vireos and American Redstarts (as well as several Hoodeds). Saw relatively few resident species (Attila, Rose-throated Tanager, Red-thr. Ant Tanager, Fawn-breasted Hummingbird).

We finally netted a ^{HOWA} bird along the main NE-trending trail, filling a gap of ~150m where we didn't have a HOWA previously. It was an imm. ♂, about 7cm from its nearest neighbor on each side. Returned to P. Movelos ~ 1300h.

Came out to the hutale area again in late P.M., but neither you nor I got a single response in over an hour's trying.

13 OCT

Puerto Morelos Area

DK Blue [♂] left

Continued working in the grid area along the Vallarta Rd. Captured a ♂ Hooded W. Warbler had his territory straddling the road - several other birds seen crossing rd, so this may be common. Other captures included 3 Black-and-white Warblers and a Spadebill gave its rapid Ti-di-dit call in the net. Saw a gray-necked Wood Rail along the aqueduct.

14 OCT

Again worked at study site along Vallarta road. Very difficult to get Hooded Warblers to respond aggressively to playbacks. We had one or two close calls, but captured nothing. Continued surveying and setting marked trails (today, ran E-W. line 50m S. of Vallarta road. Gene & Kim netted a ♀ HOWA immediately adjacent to the territory of the DK Blue-left male we caught yesterday. She was in "typical" male habitat - closed canopy, dry forest. Late in the afternoon we returned and netted a class 1 ♀ in dense scrubby habitat north of the road, about 100m W. of the terminus of the main NE-Mudry trail. Banded her Red/Orange on right leg. No luck when we tried to get response from the 2 ♀♀ territories just S. of the rd. No rain today.

♀
Red/orange-Rt.

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14 OCT

Met with Arturo Lopez, Mauro Berlanga, Felipe Sanchez, and Patricia Zugasty at dinner and made plans for the coming year's research. Felipe now is introducing his intensive milpa project into 23 Maya Villages in Quintana Roo. About half will be growing corn and beans, most of the rest will be devoted to vegetables, which will be sold in Chetumal and (eventually) Cancun. Arturo now in charge of science planning for the new Sian Kaan biosphere reserve near Puerto Morelos. Mauro has been doing the mist-netting for us. Interesting results in the most recent netting at Felipe's Selva median site - Mauro got about 8 Protonotary Warblers, plus a large number of other migrants.

15 Oct

Working along Vallarta Road again. Picked up Mauro in Pto. Morelos at 5:45 and drove out to the grid. Lots of migrants moving through today, although there hasn't been a noticeable front moving through (no rain for past several days; no temp drop or wind shift). We saw Gray Catbird, Indigo Bunting, Rose-breasted Grosbeak, Tennessee Warbler, Philadelphia Vireo, as well as the "regular" warblers.

15 OCT
cont'd

and Vireos we've seen all week. I still haven't seen any Black-throated Green warblers, although I've seen a couple of them yesterday. Main ~~birds~~ migrants around now are HONT, MAWA, BAWW, AMBE, WEV, VOWA; We've seen a couple of KEWA's, a few OVEN, 2 or 3 WEWA, 1 ^{Summer Tanager} Swainson's Warbler; Also a Swainson's Thrush; Many of the birds we saw this morning were definitely new arrivals - small groups would fly up, linger a while, then wing it toward Vallarta.

18 Oct

Working along Vallarta Road

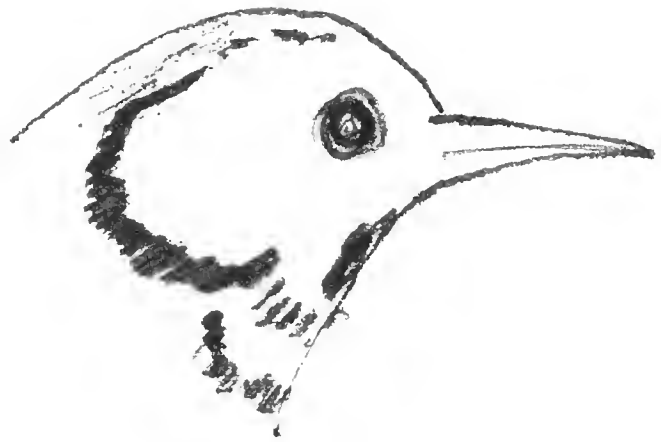
Over slept until 05:20 - D. didn't hit the road until 6:15, then got a flat tire on the road between Puerto Morelos and the Jct. with Mex. hwy 307. Not an auspicious beginning. Weather warm and humid, as it's been all week (no rain since about the 11th). Bird activity seems generally rather low, even early in the morning. Gene and Ken spent the morning following warblers, while Pat, Mauro, and I continued surveying trails through the study area and trying to band "new" Hooded Warblers where the opportunity arose. We began by flagging an E-W trail from the 200m mark on our main NE-trending trail. This trail went ~ 300m before intersecting our main N-S boundary trail along the E. edge of our study site. We then headed N. along the latter trail, before cutting another, shorter E-W trail from a point ~~200~~ 100m S. of the NE corner of our study area. We captured 2 more Hoodeds, and saw several more; ~~all~~ ~~area~~ no fewer in this entire section of the study area.

18 Oct
cont'd



← dark
"goatee"

♀ HUIA (Class 3)
from P.T. B



(~ 10 km N. Akumal)

19 OCT
1984-14
Pt. Survey # 14

Pt. A

Point surveys N. of Tulum in
5-8m high selva. Dense selva baja w.
Pseudophoenix palms, Beaucarnea "chit", Chechen, etc.
♂, ♀ HOWA, 3 MAWA, WEVI, yuv., Peppershrike,
Spot-breasted Wren

Pt. B

WEVI, OVEN, Scrib Euphonia, 2 ♀ HOWA
(one class 3, one class 1)

Pt. C

(wetter forest w. Mangrove)
Green Heron, 4-6 Yuc Jump, NOWA

Pt. D

(dry, dense forest)
Pygmy Owl, WEVI, AMRE, ♀ HOWA (Class 2),
Bl. Catbird, Spot-br Wren, LEFC

Pt. Survey # 15
1984-15

Pt. A

Thick selva baja edge w. Pseudophoenix etc.
1 km S. Akumal
♀ HOWA (Class 2 or 3), Cin. Hummer, Fawn-br Hummer,
[Second HOWA chirping], Fork-tailed Emerald,
2 Yuc. Vireo, WEVI, 3 Soc FC, Scrub Vireo
Rose-Th Tanager, Spot-br Wren, 2 MAWA,
Top. Mockingbird, White-rumped Emerald

Pt. B

Comm Yellowthroat, ♀ HOWA (Class 0-1). Trace of black
on auricular area - ; Spot-br Wren; 2 WEVI
Gray Catbird;

PJC

Yuc. Vireo, WEV, Scrub Vireo, Fawn-br Hummer,
Trop Mock.

PT.D

♀ 4000 (Class 1.5), Scrub Euphonia, 2 WEV, 1 Yuc Vireo
...

Visited Coba ruins, had lunch at
Villa Arqueologica There. Did some light bird-
watching, getting a good look at a Thicket
Timamou. Migrants seen at Coba today
included Hooded w., MAWA, AMRE, BAWW,
Great crested FC, Yellow-throated w., Yellow
Warbler, BTGW, Eastern wood Pewee, Least
Flycatcher, Gray Catbird.

2005

Vegetation Survey in study area

HOWA ♂ #1
White-Right

White R - just N. Vallarta Rd and E. of S. terminus of NE-trending trail. Dense, viny woods with emergents to ~22', mean ht 18'. Lots of palms in understory - little ground cover. Territory borders on an aguada that is partly wet, but most of territory is wooded w. about open meadow-type of or low shrub habitat.

HOWA ♂ #2

Pink-Right

Pink R - on NE boundary trail N. of Vallarta rd. Heavily wooded with somewhat taller forest than #1. Very dense palms understory, but little herbaceous ground cover. Small water-filled aguada at edge of territory (maybe within it). Circle is just S of trail.

HOWA ♂ #3

Lt. Blue-Right

Light Blue-R just NE of #2 along same trail. Quite similar, but palm understory even denser. Aguada present on N. side of trail - maybe within territory.

Circle is just S. of trail

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HAWA ♂ #4
Orange-left

Orange left - about 2/3 of circle is sim. to last points, except less dense palm understory. Other third is quite open, with no palms and few shrubs and trees. Beyond this area, habitat grades into brushy *Leucaena*-type habitat (South of this territory). Most of taller trees here are a white-barked legume (*Cyathostemma*?). Circle is just S. of trail

HAWA ♂ #5
Black-left

Black left - along NE-trending boundary trail (Circle is just N. of trail). Similar to territories # 2 and 3. Fair number of palms in understory. No aguadas in immediate vicinity of territory - fairly dense & well-shaded understory.

HAWA ♂ #6
Red-right

Red-R: along NE-boundary trail (Circle is just S. of trail). Like last #'s territory, except includes 2 water-filled aguadas on S. side. Fairly open vegetation with lots of seen getting to ground; few palms in understory. Scattered large trees, but most are quite small.

HAWA ♂ #7

chart-left

Chartreuse-left; at top (NE) corner of NE boundary trail. Circle is due S. of trail in an area half 'normal' forest and half dry aguada with little ground cover or palms.

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21 Oct

HOWA(♀)#8

Unbanded

Vegetation analyses of HOWA territories
Territory of class 5 ♀ located along the side of an aguada (partly with H₂O, part a large open sedge and grass-filled meadow). Vegetation is thorny scrub with occasional taller emergents. Many pathways and small clearings give area an especially patchy aspect. Territory is just S. of Vallarta Road. No palms.

HOWA(♀)#9

Chart/or-left

Class I ♀ territory located ~ 70m S. of Vallarta rd in heavy forest that looks like good meale-type habitat. Territory borders a small dry aguada with grasses and sedges, but territory proper looks like typical forest without significant breaks or gaps. Palms present.

HOWA(♂)#10

Unbanded

This male's territory is between #9's to the S. and a yellow-banded female to the N. (Yellow-R ♀ borders the Vallarta Rd.). Area here is basically dry, fairly tall forest, but it has been disturbed by wood-cutting; lots of small openings and trails, with some heavy brush tangles. A dry, shaded riñale (no grasses or sedges) borders this territory on the east side. Palms present.

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21 Oct - cont'd

HWA (♀) #11
unbanded

territory ab. to #8 to the N.; also on E. side of
some open meadow-aguada complex. Territory
#11 is occupied by a class 3 female which
seems to prefer the open savanna-like areas in favor
of dense brushy woodland. Vegetation in territory
is low, thorny woodland with exceptionally dense
shrub layer of thorny bushes and vines; no palms here.
Canopy ht = 14 ft. (mean), with emergents to ~21'.
Shrub density is even higher than our vegetation
sampling method would indicate, since we didn't
count dead stems, which abounded.

We had a mist net set in territory #8
most of the morning. A few days ago this same
net caught Yucatan Woodpecker, Bell's Vireo,
White-eyed Vireo, and Black Catbird. Today
we got a Wood Thrush and an Ovenbird,
but still no Hooded Warbler.

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22 Oct

Vegetation mapping of Hooded Warbler Territories

HOWA(♀)#12
Red/Green-left

Low, open woodland that borders a large meadow-tintal complex S. of Vallarta Rd. Territory is W. of the tintal, and extends from the roadside S. for 50-60 m. Some thickets of spiny Acacia bahamensis, but most of area open enough to support a sparse ground cover of grasses and sedges. Lots of small pathways and evidence of woodcutting so area is more open than it would be in ~~the~~ undisturbed conditions. Canopy ht 14' (mean) with emergents to 18'.

HOWA(♀)#13
Red/Orange-left

Dense, brushy area N. of Vallarta rd, and bordering the W. side of a large tintal-meadow area. Very abundant woody shrub stems (much Acacia bahamensis), no palms, v. few tree-sized (>10 cm dbh) stems. Canopy ht = 12' (mean); emergent ht. = 17'.

HOWA(♂)#14
Unbanded

Fairly tall and open drier forest immediate W. of ♀ territory (#13). Lots of fairly large trees, many palms in understory, little ground cover. Canopy ht = 22' (mean); 31' (emergent). Tintales surround territory on 3 sides, but ♂ not seen to venture into their scrubby vegetation.

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HOWA #15 (♂) A small territory extending just north of Green-Right Vallarta Rd. and East of large tintales. Bordered on the N. side by territory of White-Right ♀ (territory #16). Vegetation here seems somewhat intermediate between "typical" ♂ and ♀ habitats. Fairly dense brush understory, but also a good number of trees >10cm DBH. A few small palms in understory. Canopy ht. = 19' (mean) and 28' (emergent). Some Acacia bahamensis near edges of this territory.

HOWA (♀) #16 Fairly extensive territory N. of Vallarta Road and E. of tintale zone - just N. of territory #15. Vegetation is fairly similar to #15, but fewer large trees and more shrubs and vines. Dappled sunlight penetrates to forest floor, but no large opening in our veg. circle. Elsewhere in this territory there are extensive clearings and trails - fairly heterogeneous habitat mosaic, except lacking tall forest. Canopy ht = 15' (mean) 18' (emergents).

HOWA (♂) #17 Typical "male-type" upland forest with moderate amount of palm in understory, moderately abundant shrub and ground cover. Canopy ht = 18' (mean), 28' (emergent). This territory is just S. of Vallarta rd and E. of tintale zone

Howler (♀) #18

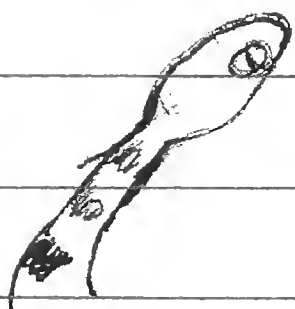
Yellow-rig

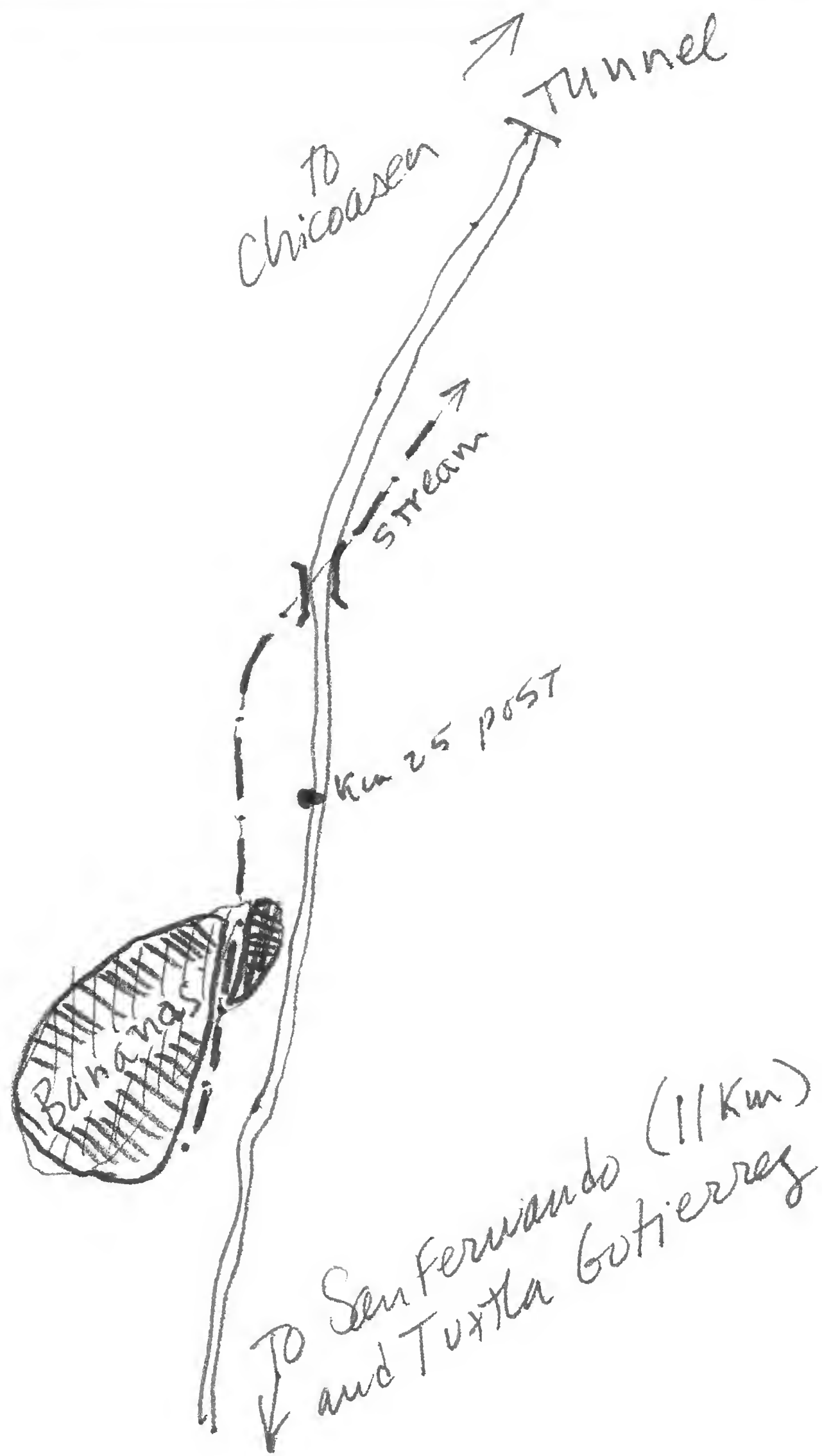
territory west of male terr. #17 and E. of
total - S. of Vallarta Id. E. portion of territory
fairly sim. to #16's, but W. part, where she
spent most time, was a dense tangle of
short forest w. much Acacia kuhneri, scarce
palms. Very thick shrub-vine layer. Canopy ht -
16' (mean); 22' (emergent).

23 OCT

En route Puerto Morelos - Chichen Itza

Packed up in the morning, dropped Pat Melthrop off at the Cancun airport for her return home, and drove W. to Chichen Itza. Weather today very unsettled - a heavy squall hit Puerto Morelos in mid-morning, and we had cloudy skies with intermittent showers for the rest of the afternoon. This is the first heavy rain we've had in well over a week, and the aguadas have dried up noticeably since we began our work two weeks ago. One of the workers of "La Ceiba" brought in a small, blotched cat-eyed snake - looks like Leptodeira - I didn't keep it.





Spaniards Blamed for Starting Mexico's Lumber Shortage

Editor's note: The following is taken from the November edition of Lloyd's Mexican Economic Report.

Back in 1526, the Spanish began stripping the verdant Valley of Mexico of its trees. And after Mexico won its independence, the soaring demand for charcoal and lumber was met by the indiscriminate cutting down of millions of trees on the theory that the supply was unlimited.

These "slash-and-burn" practices continued after the 1910 Revolution that overthrew the dictatorship of General Porfirio Diaz and, to this day, have plagued large areas of the country.

Consequently, for years Mexico has been forced to import large quantities of lumber and paper. But this situation appears to be changing. The Republic's lumber industry, in association with the Ministry of Agriculture and Hydraulic Resources (SARH), will invest 544 million dollars to establish "tree farms" across the nation.

In making the announcement, Jorge Leon Castanos, undersecretary for forestry of SARH, said that 495 million dollars of the "tree farm" financing will be supplied by the Republic's

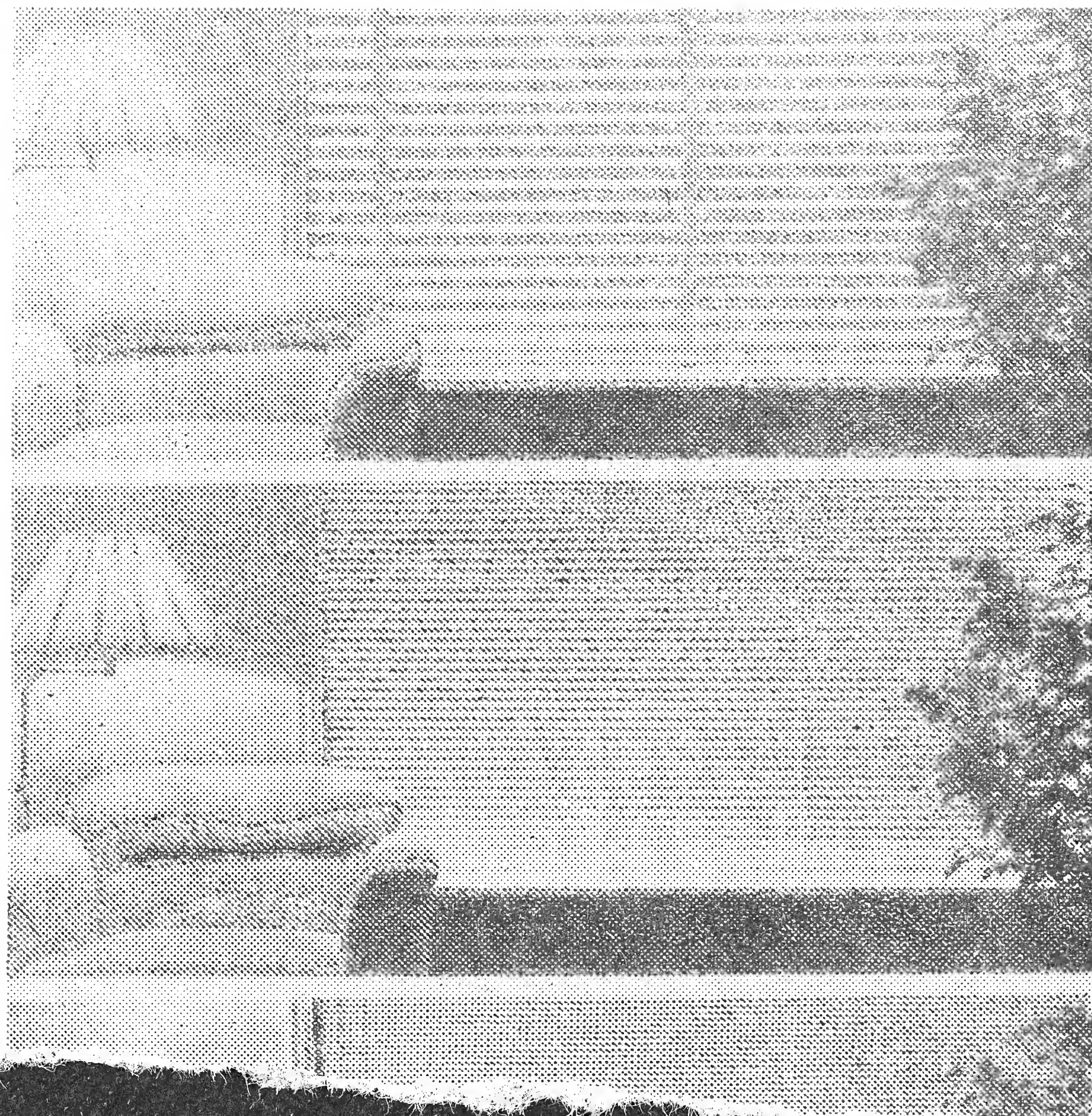
lumber industry, with the balance of 49 million dollars coming from SARH.

These "farms" are expected to replace trees cut down, allow national lumber demand to be met, eliminate imports and, possibly, they will someday give Mexico an export potential.

SARH estimates that Mexico's national lumber production in 1984 will be 9.1 million cubic meters, or 3.85 billion board feet, a 4.5 increase over lumber production in 1983.

LatAm Briefs

Financial



Lunar Eclipse May Have

By **MARINA KUPITSKAYA**
The News Feature Writer

So Ronald Reagan remains firmly ensconced in the White House despite all the difficult astrological influences.

Now, the other alternative offered in this column was, if Reagan did get reelected, that he would not live until the end of his term.

A chart for the time that Reagan is inaugurated for his second term, January 20, will be more informative on that score.

Indira Gandhi's assassination October 31 at

Star Gazing

8:15 a.m. brings up the fact that eclipses register before they occur.

The lunar eclipse of November 8 took place within about a degree of India's prime minister's mid-heaven and fourth house of endings. Saturn was exactly on that fatal point.

There was in her own horoscope a focus on her relationship with her employees.

J. F. Lynch
1984

12 Nov. Puerto Morelos, Quintana Roo

Met Laurie Greenberg at "La Ceiba", and we drove up to Cancun to pick up Dennis Whigham and Martha Vanderkoet. They arrived (from Chicago and New Orleans, respectively) within 20 minutes of each other. We drove back to Puerto Morelos, got set up at the hotel, and later met with Felipe Sanchez and Patricia Zugasty to discuss plans for experimental manipulation of the litter and shrub layers in the forest.

13 Nov

We drove out to Felipe's ranch to set up our mist nets in the acahual site, only to find that Oscar, the guy who owns the acahual, has decided to do some serious farming. Neither Arturo Lopez nor Mauro knew about this, but Oscar ended up clear-cutting over half of our original study site (The F-row of 2 nets, plus ~~row~~ 8 of 10 of The E-row). After an initial reaction of dismay, verging on panic, I put in another row north of row D (call this row DD), and slightly lengthened to other 2. ~~So~~ In all, we squeezed in 20 nets.

18 Nov.

Puerto Morelos area

Up at 0400. Finished fifth (and final) day of mist-netting at the acatural dike, and took down the nets. Caught 35 new individuals today (no recaps. from previous summer or winter), with only a couple of 'new' spp. for this banding period (Rose-Throated Tanager, yellow-billed cacique)

Spent most of the afternoon organizing and compiling data. At about 1530 we drove out the Vallarta road ~ 1.5 km to check on the status of the turtle study site. There has been a dramatic drying up of the flooded areas in the 3 weeks or so since I was last out here. Many pools are now completely dry, and even the largest have contracted to small remnants. We noted a gray-necked Wood Rail and a green Heron (the same one that's been hanging around since I first arrived 6 weeks ago) on the bank of one tiny remnant pool that was swarming with fish (and/or tadpoles). Warblers seen included several HOWA, BTBW, AMRE, MFWA.

We took a short stroll through the CIPRO botanical garden at dusk and got a good look at a Black-Throated Blue Warbler foraging low on the outer branches

Jaywick
1984

of a tall tree at the edge of a clearing.

19 Nov.

En route Puerto Morelos - Bacalar

Packed up our belongings in the A.M. and drove up to Cancun after checking out of "La Ceiba". Ran errands, did some shopping, had lunch (at Carlos 'n' Charlies' - great T-shirt display; mediocre food) and dropped Denny off at the airport in time to catch his 15:25 flight home via Chicago.

We left for Bacalar from the airport ~15:00, driving to Tulum before stopping briefly at a flooded quarry cum dump for 20 minutes of aquatic bird watching. We saw a surprising variety of species here:

flooded quarry just W. Highway 307 at Tulum, Quintana Roo, Mexico * = migrant

* Blue-winged Teal (2)

* Shoveller (1)

*? Black-necked Stilt (1)

* Semi-palmated plover (3)

* Willet (2)

* Black-bellied Plover (2)

* Least Sandpiper (~2 or 3)

* Semi-palmated Sandpiper (~10)

Tiger-butterfly (1) - life species for me

Green Heron (1)

* Kildeer (2)

J. Lynch
14/04

En route Bacalar - cont'd

19 Nov

- * Spotted Sandpiper (2)
- * Ruddy Turnstone (~10)
- * Yellowlegs (Greater?) (2)
- Jagana (3)
- Little Blue Heron (1)
- ...

Left this area at 16:40 and drove to F. Carillo Puerto before stopping to purchase gasoline and food to go. Arrived in Bacalar about 19:00 and checked in at the "Hotel La Laguna". Rain showers between FCP and here, but not enough to really wet things down.

20 Nov

Point surveys around Bacalar

Up at 0600. After coffee & bread in our rooms, we headed N. on Mex Hwy 307, and turned W. just N. of Bacalar onto the paved road to Reforma. Our first stop was an active milpa where jalapeño peppers were currently being grown (in part of the area), and this year's corn stalks were interspersed with low papayas in other parts. This milpa is about 10 ha (500m x 200m) very few (<10) scattered dead snags, with patches of dense poke weed among the papaya. Burned trunks lying around

Bacalar area - cont'd

20 NOV

are mostly small, suggesting that this milpa was cut from fairly young secondary growth

Jct. Mex Hwy 307

ca. 10 km (by rd) NW. Bacalar along road to Reforma Quintana Roo, Mexico

1984-16

point A

melodious Blackbird (1), Brown Jay (8), Parula (1), Magnolia W. (1), Worm-eating warbler (1) - in branches of felled dead tree with several other species of warbler. More than 50m from nearest wood line; Gray Catbird (1) - This is Jalapeño area -

pt. B

Tropical Kingbird (1), Buff-breasted hummingbird (1), White-bellied Eucard (1), Common Yellowthroat* (1), Least flycatcher* (2), Roadside Hawk; (Lots of papaya & milpa here), Am. Redstart* (♀), Magnolia Warbler*, Green-backed Sparrow (2), Gray Catbird*, Great-tailed Grackled in tailed Grackle.

PT C

Rose-breasted Grosbeak (8), Great-tailed Grackle (25), Melodious BB, ♀ Hooded Oriole, Brown Jay (6), Red-billed Pigeon (2), Trop. Mockingbird (2), Blue Ground Dove (2), Hummingbird sp. (3), WEVI* (2), MIAWA*, Comm. Yellowthroat*.

20 Nov 84

Pt. D

Blue ground dove (2), Fawn-breasted Hummer, Soc. FC (2), Great-tailed Grackle (sev.), Clay-colored Robin, Wk-collared Seedeater, LEFC* (2), MAWA* (2), Comm. Yellowthroat*, WEVI* (2), Rose-breasted Grosbeak* (2).

Pt. a was mostly active pepper plant gro; pts. b, c, and d were more overgrown with herbs, and had small papayas (1-2m tall) scattered through last summer's corn stalks. Herbaceous canopy was ~1-1.5m tall, with lots of pokeweed in places. This milpa bordered by fairly dense secondary forest, but we didn't count birds heard inside the forest.

...
We continued driving w. toward Reforma, noting gray-necked Wood Rails in several places along (or on) the road. We stopped at another recently abandoned milpa to do another series of point surveys. This one is quite similar to the last, but with a denser fern-dominated herbaceous stratum, with some scattered living palmettos and a very small number of standing dead snags.

1984-17

Recently abandoned milpa 1 Km (by road) E. Reforma
on road to Bacalar, Quintana Roo, Mexico
(oral)

J.F. Lynch
1984

20 Nov. Bacalar area - cont'd

{ PT. A } Brown Jay (6), ♂ Cardinal, Red-billed Pigeon, Melodias
BB (2), ♀ Fork-tailed Emerald, Fawn-breasted Hummer,
Spot-breasted Wren, Keel-billed Toucan, ♂ Blue
Bunting, White-collared Seedeater, MAWA* (2),
Comm. Yellowthroat*, Rose-br. Grosbeak*, OVEN*,
♂ Orchard Oriole*, LEFC*.

PT. B A Comm. Ground Dove, Trop. Kingbird, Melodias BB,
♂ Cardinal, Green-backed Sparrow, Green Jay
(4), ♂ Fork-tailed Emerald, White-collared Seed-
eater (6), Hooded Oriole, Bl-headed Saltator,
~~Indigo~~ Yellow-billed Cacique, Trop. Mock,
WEVI*, MAWA*, C. Yellowthroat*, Indigo
Bunting* (6).

PT. B B Wh-coll. Seedeater, C. Yellowthroat* (2),
MAWA*, Rose-br. Grosbeak* (3), Indigo Bunting*.

PT. C Trop. Kingbird, ♂ F-T Emerald, Wh-coll. Seedeater (2),
Spot-br wren, Buff-bellied Hummer, Aztec
parakeet (2), ♂ Blue bunting, Bl-headed
Saltator, Gr.-backed Sparrow, LEFC (2)*,
MAWA* (2), C. Yellowthroat*, WEVI*

.....

We drove out to The Campo Forestal Exper-
imental "San Felipe Bacalar", but The place was closed
down for Mexican Independence Day (or revolution day).
We drove back to Bacalar and found
Gilberto Chavez at home. Made plans for

J. F. Lynch
1984

Bacalar area - cont'd

20 Nov. him to accompany us This afternoon - we want to drive w. along the road to Escarcega (Campeche) to check out that section of Quintana Roo.

left Bacalar at 13:00. Drove 15 km S. to Jct with Chetumal - Escarcega road, and turned west. Noted Black-shouldered Kite

just N. of Jct in cattle pasture. Drove 72 km W. to Campeche border through heavily disturbed, hilly country. Flat areas between hills intensively cultivated for rice, sugar cane. Gilberto says this area has many remains of ancient Maya canals, irrigation systems, chultanes, etc.

lots of standing water, especially in roadside ditches. We noted 7 or 8 Gray-necked Wood Rails, plus Little Blue Heron (2), Snowy Egret (2), Great Egret

(5), Cattle Egret (~50). We continued all the way to the Campeche border (The exact spot is not marked due to a boundary dispute), then backtracked a couple of hundred meters into Quintana Roo, where we parked and followed a tractor path N. through second growth (Acahual) vegetation. We conducted a series of point surveys in an acahual that was roughly similar to our netting site

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1984

Bacalar area - cont'd

20 Nov. near Puerto Morelos, but more dominated by ferns. "Canopy" is 1 1/2 - 2 m high, with scattered Cecropia and other emergents to 4 or 5 m tall. Pokeweed present:

Point Survey
1984-18

Acahual just N. Mex hwy 0.1 km W. (key rd) border with Campeche (ca. 90 km W. Chetumal), Quintana Roo, Mexico

Point A Golden-fronted Woodpecker, Chachalaca (sev.), Fawn-breasted Hummingbird, Red-billed Pigeon (2), ♂ Cardinal, Collared Araçari, Yellow-throated Warbler*, MAWA*, WEV.*

Point B (Strongly dominated by pokeweed 1-1.5 m tall) Keel-billed Toucan, Bl-headed Saltator, Clay-colored Robin (2), Red-billed Pigeon (2), Trop. Kingbird, Guatemalan Ivory-bill Woodpecker, Golden-fronted Woodpecker, Thicket Tinamou, Yucatan Jay, ♂ Painted Bunting*, ♂ Howa*, Gray Catbird*, Rose-breasted Grosbeak (2), LEFC*, Oriole sp.

Point C (Sim. to Pt. A, with strong domination by 1.5-2 m tall ferns; scattered emergent palms and other species (~~also~~ Cecropia included) Red-billed Pigeon, ♀ Fork-tailed Emerald, Spot-br Wren, ♂ Blue Bunting, Howa* (2), WEV;*, C. Yellowthroat*, Y-throated Warbler*, Tennessee (?) w.*, Indigo Bunting* (4).

20 Nov 84

Point D

(a little lower - 0.5m - with very thick
bracken fern & scattered Scaevola)

C. Yellowthroat, * Indigo Bunting* (13),
MAWA*, WEVI* (2), LEFC* (1), Melodious
BB.

We finished at 1545, and drove back
toward Chetumal, stopping at a place
8 km back to the east, and turning
N. on a small dirt road that goes through
acahuales and pastures. Unfortunately,
we were running out of daylight, and
couldn't go as far as we'd liked on this
road (Gilberto says it goes for ~ 40 km).
We stopped and did a set of point survey
along the road in an area of broken
secondary vegetation that had a bit more
woody vegetation than last site (older) -
grades into forest within a few meters.

Point Census
1984 - 19

Acahual 0.5 km N. Mex Hwy, 8 km
Chy rd) E. ~~Chy~~ border with Campeche,
Quintana Roo, Mexico

Point A

☉ Melodious Blackbird, Aztec parakeet (20),
Orange Oriole (2), Spot-breasted Wren,
Gr-tailed Grackle ♂ Barred Antshrike,
♂ Black-headed Oriole, ♂ Yellow-tailed
oriole (Life Bird for Me), Hooded Oriole,
♀ HOWA* (class 4 or 5), MAWA*, Gray Catbird*

J.F. Lynch

1984

Bacalar area - cont'd

20 Nov.

Point B

(grading into rough, overgrown pasture
w. 1-2m canopy)

Soc. FC (2), Roadside Hawk, Amayra sp (2),
Mel. BB (2), Blue Bunting, Habia
fuscicauda (2), Red-billed Pigeon, MAWA*,
Gray Catbird

Point C

(Sim. to PT. A, w. scattered emergents to 5-6m)
Mel. BB, Brown Jay, B-headed Saltator (2),
Yellow-tailed Oriole, Yuc. Jay (3),
Hooded Oriole, Red-billed Pigeon, Yellow-
billed Cacique (2), C. Yellowthroat*, LEFC*,
♀ HOWA* (Class 0), MAWA* (2), Gray Catbird*

Point D

Yucatan Jay (6), Hooded Oriole, Mel.
BB (2), Bat Falcon.

Survey stopped short when we
were run off by state border police.

...

Returned to Bacalar at ~1830 hours.

21 Nov.

Trip to coast east of Minimes

Up at 0500. Picked up Gilberto a few
minutes after 0600 and drove N. from
Bacalar to the turn-off to Xcalak, some
45 km N. Bacalar. Road runs due E. to
the coast (55 km), then turns S. for
another 56 km to Xcalak, where it ends.

The road is excellent (paved ~~and~~, straight, and flat) all the way to the coast. It passes from *selva mediana* through extensive flooded forest, savannah, and everglades-like areas of Sawgrass, palmettos, and stunted Rhizophora. About 13 Km E. of the Jct. with Mex Hwy 307, we entered an area of extensive open, shallow-water with mudflats, levees, construction spoils, etc. This place was absolutely teeming with water birds, including the following:

Wood Ibis (1), Great Egrets (~100), Snowy Egret (~50), Spoonbill (~10), Little Blue Heron (~10), Great Blue Heron (4), Louisiana Heron (2), Black-necked Stilt (1), Green Heron (1), Limpkin (~10), American Coot (100+), Blue-winged Teal (100+), Northern Shoveler (5), Semipalmated Sandpiper (100+), Least sandpiper (2), Pectoral sandpiper (1), Black-bellied Plover (4), Double-crested Cormorant (100+), White Ibis (50+), Kildeer (1), Bare-Throated Tiger Heron adult (1). Dozens of Mangrove Swallows in the air. Yellow-headed Vultures* common along road (no turkey vultures seen) - also a few Black Vultures. Other raptors included 2 Crane Hawks* (like species for me), 3 Laughing falcons, 1 imm. Gray Hawk. We note Hundreds of Red-winged blackbirds,
* Life species.

J.F. Lynch
1984

Bacalar area - cont'd

21 NOV

as well as a number of belted Kingfishers,
and 1 or 2 of each of the following: Palen Warbler,
Comm. Yellowthroat, Groove-billed Ani, Mockingbird.

We stopped to do a series of point survey
in an area of secondary scrub along the
road. Low secondary forest, ^(5-6 m tall) borders the
scrub, and some of the birds we saw came
out of the trees. Scrub was 2-3m high, patchy
with lots of low areas between bushes & young
trees; ferns abundant.

Point Survey

1984-20

Secondary scrub 23 km (by rd) E. Limones
on road to Majahual, Quintana Roo, Mexico

Point A

Trop. Kingbird (2), Yuc. Jay (6), Trop. Mockingbird,
Red-billed Pigeon, Aztec Parakeet (6), Crane
Hawk-hummingbird sp., Blue-gray Gnatcatcher (2),
Comm. Yellowthroat*, COVI*, BAUW*, MAWA*,
White-collared seedeater (25-30).

Point B

Common hummer, Rose-throated Tanager, Yuc. Jay,
♂ Fork-tailed Emerald, Hooded Oriole, Comm.
Yellowthroat*, MAWA*, WEVI*, Gray Catbird*,
Yellow-throated Warbler*.

Point C

Fawn-breasted Hummer, Olive Sparrow,
Northern Bentbill FC, Trop. Kingbird, Wren sp.,
♀ Am. Redstart*, WEVI* (2), HOWA*, Yellow
Warbler* (2), MAWA*, LEFC*

Point D

Green Jay, ² HOWA* (class 0 or 1 ♀), ^{1 male, one} ♀, ♂ AMRE* (2),
Yellow Warbler*, LEFC*, MAWA*

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1984

Bacalar area - cont'd

21 Nov

about 45 km E. Limones the road breaks into open water area with stunted red mangroves for about 4 km, then back into low forest. Past left turn to Uvero 55 km E. Limones, and finally reached the coast (and end of pavement) at 59 km E. Limones. Dirt road continues S. for ~50 km to Xcalak, but weather was threatening rain, so we parked at the coast jct. and conducted a series of point surveys in a strip of dense coastal scrub between the beach (actually a rocky shore) and the mangla to the west. Coastal scrub is only 30-50 cm wide in most places, so some birds may have come out of mangroves. Scrub is < 2 m high in most places, and is dominated by mounds of coccoloba, palmetto, and various shrubs.

Point Survey

1984-21

Coastal scrub vegetation at Majakual, 59 km (by rd) E. Limones, Quintana Roo, Mexico

Point A

Trop. Mockingbird (2), Trop. Kingbird, Common Tody Flycatcher **, Louisiana Heron, Northern Waterthrush*, Yellow Warbler*, Comm. Yellowthroat*

Point B

Scrub Vireo, WERi*, C. Yellowthroat*, Cape May W.*

Point C

Trop. Mock., Soc FC (2), Orange Oriole (3), Hooded Oriole (2), Trop. KB, Cin. Hummer, C. Yellowthroat*, Yellow Warbler*

Point D

Trop. Mock., Yellow Warbler*
(4th census cut short by deluge)

** Life Bird for me

J.F. Lynch
1984

Bacalar area - cont'd

21 Nov. We returned to Bacalar through intermittent rain; spent a couple of hours with Gilberto at the Campo Experimental looking at his bird ~~results~~ data from his mist-netting study, which will have gone on for 2 years as of this coming February. He has captured 83 spp. of birds, netting at a mature Selva mediana site, and in a secondary selva ~12 years old (canopy at this site is already 12-15 m high, so it is hardly an old-field like our actual at Puerto Morelos. The main problems with the data are 1) only 13 nets per site, run for 2 days each month; and 2) not all that many captures per net - many spp. represented by only 1 capture, and some months Gilberto caught only 2 or 3 individuals at a given site. We talked about the analysis of the data, and I volunteered to help him with the statistical analysis. Also, Gilberto will join us for a day or two in Puerto Morelos when we are netting next week.

22 Nov. Trip to Sian Ka'an biosphere reserve
Left Bacalar at 0630 and drove directly to Felipe Carrillo Puerto, arriving about 0800. We met Arturo Lopez and Mauro Berlanga

Xian Ka'on - cont'd

22 Nov.

On the way up to FCP we noted a new, wide dirt road that heads E. from The hwy crest N. of Andres Quintana Roo (looks like a PEMEX operation of some kind). This is 44 km S. of FCP.

We drove E. from FCP on the dirt road to Vizia Chico, which is within the reserve. The western boundary of the reserve is now marked by a large billboard, ca. 28 km E. of FCP. A couple of kms. into the reserve is an area where SEDUE is in the process of constructing a sizeable new building to house scientists & support staff for Xian Ka'on.

We spent 1/2 hr. or so walking around in a large milpa just N. of the lab site. It is very young (this year's corn stalks are still standing) with a heavy growth of ferns & other herbs 1-1.5m tall. We decided to begin mist-netting here & in the adjacent selva mediana. Not much bird activity in the actual perce, but we saw the following spp. in adjacent hedgerows: Fawn-breasted Hummingbird, Cinnamon H., White-bellied Emerald, Fork-tailed Emerald, Tropical Mockingbird, Least FC, Tropical Kingbird, * Gray Catbird, Spot-breasted Wren, * Parula, Cardinal, White-collared Seedeater, Hooded Oriole. Only possible cloud on the horizon is that a rancher has been illegally squatting on this land, occasionally

22 Nov

moving cattle into the area. Arturo thinks the guy will soon be evicted, but we may be taking a chance by setting up a study plot here. Still, the combination of large area, relative uniformity, good access to the reserve's hdqtrs, and young age makes this a natural worth studying, even if for a short period.

We drove on into the main part of the reserve, stopping occasionally to note birds. Not nearly as much bird life as we saw yesterday along the Limones - Mahahual road, but we did see a fair representation of the common wading birds (see list at end of this account).

We drove out to Vigia Chico, a former Chile shipping point (complete with its own narrow-gauge railroad, long since abandoned) and center for smuggling activities. The only person who lives here now is a semi-senile old man of about 80 or 85, whose family was wiped out by a hurricane here some 30 years ago. Punta Allen is visible across the bay from Vigia Chico. We then drove a bit N. of Vigia Chico, through a little group of huts called "Ramonal", and on to another coastal point, this one being the spot where fishermen from Punta Allen leave their pick-up trucks when they're

J. Lynch
1984

22 NOV

at Punta Allen, and their boats when they're in FCP. Noted a few Palen Warblers and several Yellow Warblers along the bay shore and out in the dwarf mangroves in the flooded area just W. of the shore. Sandwich Terns, Royal Terns, and Belted Kingfishers were common.

We drove back to the west, parked camp with Arturo, who drove back to FCP to spend the night, and made our way out of the reserve on the newer dirt road that leads NW from the old road a few km inland from the coast. We stopped 4 km NW of the Jct. with the FCP-Vigia Chico road and did a set of point surveys on the NE side of the road in an extensive area of forest that seems transitional between *selva mediana subperennifolia* and *selva baja subcaducifolia*. Bird activity low, and seemed dominated by migrants.

in Xianka'an reserve

22 NOV
1984-22

Forest on NE side of road from Chumpon to Vigia Chico, Quintana Roo, Mexico
4 km NE Jct. with road from Vigia Chico - Felipe Carrillo Puerto

PT. A. HOWA (2 ♂♂), Gray Catbird, MAWA, BAWW, Redstart (♂), WEVI:

PT. B HOWA (♂) BAWW, MAWA, Redstart (♂♂), WEVI, Fan-br. Hummer, Ovenbird, Blackbird.

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22 Nov

Xianka'an - cont'd

Point C HOWA (♂), BTGW, GFWP,

Point D MAWA, HOWA; hummingbird sp., Yucatan Flycatcher (?).

- finished survey at 4:37 P.M.

- - -

Drove on out to the Jct w. Hwy 307, a distance of about 16 km. Road to Chumpon is 4 km N. on Mex Hwy 307.

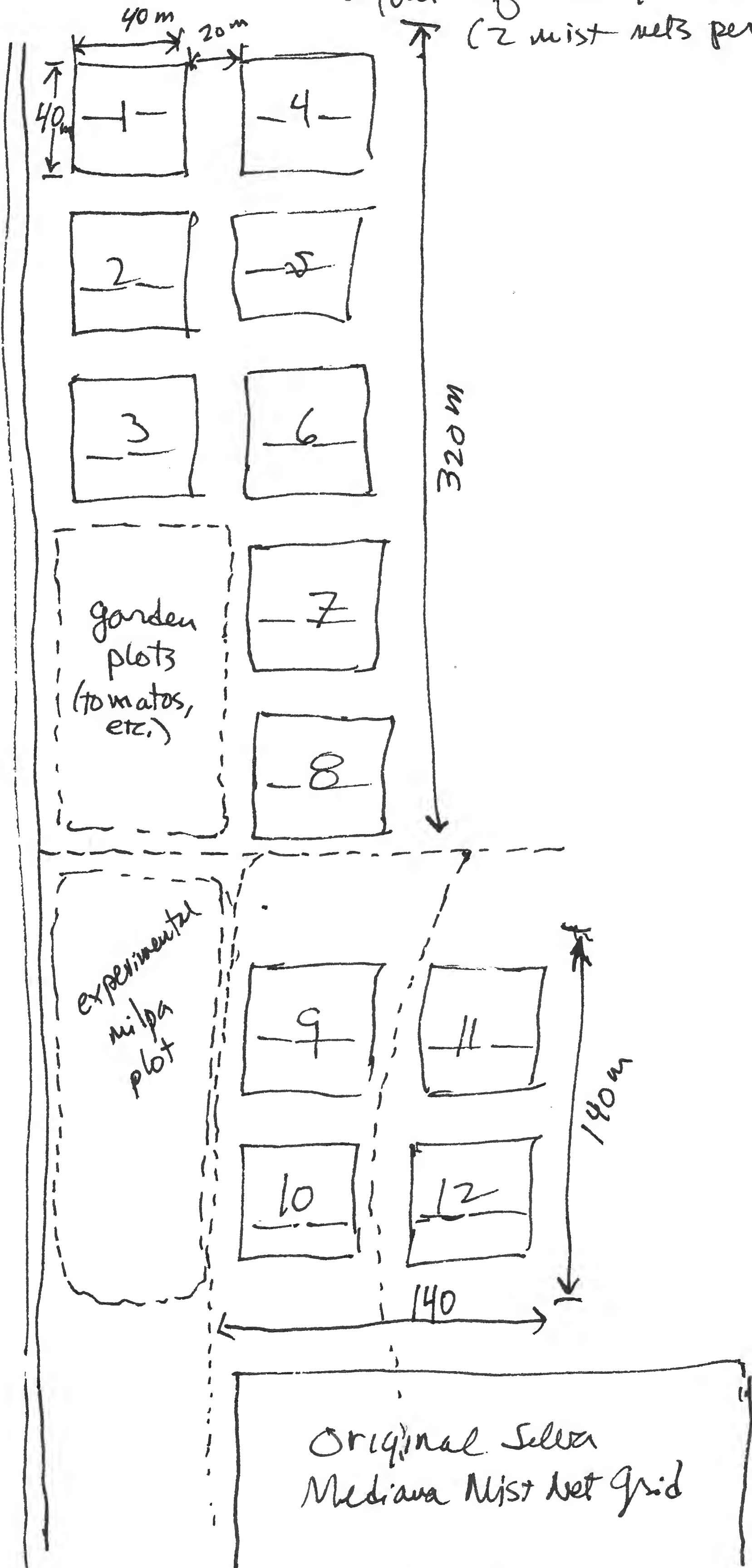
Additional bird spp. seen today in the reserve:
Little Green Heron, Great Egret, Turkey Vulture,
Louisiana Heron, Himpen, Roadside Hawk,
Comm. Black Hawk, Mangrove Swallow, Great Blue Heron,
Black-headed Saltator, Osprey, Frigatebird,
Little Blue Heron, Comm. Gallinule, Greater Yellowlegs,
Spoonbill (2), Great-tailed Grackle,
Boat-billed FC, Yucatan Jay, Brown Jay,
Aztec Parakeet, Brown Black Vulture.

Arrived back in Pt. Morelos ~ 19:30.

23 Nov.

MIST-netting at Felipe Sanchez's rancho
Spent most of the day cutting net
leaves and setting up mist nets in
Denny Whigham's 12 40x40m plots
in the Delva mediana at Felipe's place.
Each plot has 2 standard 12x2m
nets running end-to-end (as much as
possible) in a generally E-W direct-
ion.

Layout of Denny's Plots
(2 mist nets per plot)



J. Flycatcher

Felipe's ravello - cont'd

23 Nov.

Four of these plots will be left as undisturbed controls, 4 will have litter removed without fertilizer enrichment, 4 will have litter removed, with Phosphoric fertilizer added, and 4 will have litter ~~removed~~ ~~with~~ left intact, with phosphorus enrichment. The manipulations will take place in January or February of the coming year.

24-27 Nov

Mist netted for 4 mornings (ca. 5 hrs/day) in Denny's plots. Captured 33 species, 145 individuals (Daily total of "new" (new + recaps from previous months) birds as follows: 61 + 39 + 28 + 17) estimated total nettable population ~ 160-170) area covered by nets, including a 20m buffer zone around each plot is approximately 5.7 ha, so ^{nettable} bird population is ~ 30 ind/ha. (See Data Sheets for Summary)

Short-billed
Pigeon
captured here

28 Nov

Took it easy, catching up on sleep and paper work.

29 Nov

Point surveys in the Playa del Carmen area
Laurie G. and I left Puerto Morelos about 0600 and drove south ~~to~~ to Playa del Carmen, stopping briefly at a small cattail swamp along Mex. Hwy 307 (half way wasomenos) to note Green Kingfisher, Black Kingfisher

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1984

Playa del Carmen - cont'd

29 Nov

Least grebe, and green Heron in a small pool. At Playa del Carmen we turned west onto a small dirt road that follows a power line for ~ 10 km before dead-ending at the Jct. between this line and the main N-S one (maybe the same one that runs W. of Puerto Morelos). We stopped 6 km W. of hwy 307 and did a series of point surveys in a large stretch of young secondary forest (stemming from an enormous wildfire that swept the area 10 or 12 years ago). Scrubby woods are mostly ~ 5m high, with occasional emergents (living and dead) up to 10 or so m high. Almost all trees in the secondary forest are < 10cm dbh, except for these emergents, some of which evidently survived the original fires.

Point Survey
1984-23

Secondary forest along dirt road ca. 7 km W. Playa del Carmen Quintana Roo, Mexico

Point A

HOWA (not seen)*, Gray Catbird*, WEVI*, Scrub Vireo, Bananaquit, Long-billed Gnatwren, Spot-breasted Wren (2), Chachalaca (several), Fawn-breasted Hummer, Fork-tailed Emerald.

Point B

HOWA (not seen)*, MAWA*, WEVI*, LEFC*, Fork-tailed Emerald, Gray Hawk, Fawn-breasted Hummer, Brown Jay (sev.), Spot-breasted Wren, ~~LEFC*~~, Goldenr. WP.

29/10/84

Playa del Carmen area - cont'd

Point C

HOWA (not seen)*, LEFC*, MAWA*(2), AMRE* (ad ♂), WEVI*, Scrub Vireo, Rose-Tan Tanager, F-T Emerald, Pygmy Owl, Fawn-br Hummer, Spot-breasted Wren

Point D

(slightly taller woods 5-8m)

HOWA*(♂), WEVI*(2), AMRE*(♀), MAWA, BTGW, Gray Catbird*, F-T Emerald, Wedge-tailed Sabrewing, Fawn-br Hummer, Bananaquit, Yuc. Vireo, ~~Black-chinned~~ Rose-Tan. Becard, Scrub Vireo, Chachalaca, Rufous-br. Peppershrike.

Yellow-faced grassquits common in brushy growth along dirt rd.

We drove back to the highway, then continued S. past Playa del Carmen toward Akumal. Turned off on the dirt road to Pamul, just S. of Xcaret. Woodland here is very dense, scrubby secondary forest, but not "good" Selva baja subcaducifolia (no Pseudophoenix palms or Beaucarnea) - many leguminous trees.

Did a set of point survey along a foot path through the scrub between 10 and 11:15.

Point Survey
1984-24

low secondary forest at Pamul (km by rd, S. Playa del Carmen), Quintana Roo, Mexico

Point A.

HOWA (not seen)*, BAWW*, MAWA*, C. Yellowthroat*, Yellow Warbler*, LEFC*, Parula*, Scrub Vireo, Yuc. Vireo, Oriolebird*(2), Mel. BB, Spot-br Wren, WEVI*(2).

Point B.

LEFC*, WEVI*, Scrub Vireo, Roadside Hawk, F-T Emerald (2), Great Kiskadee.

Point C

BAWW*, WEVI*(2), LEFC*, HOWA (not seen - 2)*, Scrub Vireo, SocFC, Yuc Vireo, Spot-br Wren, Mel BB.

J. F. Lynch
1984

Playa del Carmen - cont'd

29 Nov.

A. D.
(Some taller trees around a cecote)

Keel-billed Toucan, Yuc. FC, Tolmouyas.
HOWA (♂)*, LEFC, WEVI* (2), Yuc. Vireo
.....

Drove back N. to Xcaret after lunch at Pame. Took a swim (beautiful calm, clear day), then did series of Point surveys between highway and the entrance to the lagoon. Forest here is fairly tall but dry-looking. I'd call it transitional between *Sclera mediana subcaudata-folia* and *S.M. subperuviana*. Taller trees are ~ 10m high, with some of canopy down to 5 or 6 m high in places. Fair no of acacias and other legumes. No zapote seen.

Point Survey
1984-25

Transitional *Sclera mediana* at Xcaret, Km
(by rd) S. Playa del Carmen, Quintana Roo, Mexico

Point A

WEVI*, SOC FC, Trop. Mock., Yell-backed Oriole (B),
Rose-thr. Becard, BBFC, ~~Attea~~ ^{Attea} (sev.), Trop Kingbird,
N. Bentbill FC, Squirrel Cuckoo, Cin. Hummer,
K-B Toucan, Spot-br. Wren, Yuc. Vireo

Point B

WEVI (4)*, MAWA*, BAWW*, 2 HOWA (1♂, 1
not seen)*, Spot-br Wren, Yuc. Jay (sev.), W-B
Emerald, Mel. BB (5), Yuc. Vireo.

Point C

MAWA* (2), LEFC*, Gray Catbird*, OVEN*,
K-B Toucan, Hummer sp., Brown Jay (sev.),
SOC FC, Yuc. Vireo (2), Scrub Vireo

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29 Nov.

Playa del Carmen Area - cont'd

Point D

(Somewhat
taller woods)

HOWA (♂) *, WBVi (2) *, MAWA *, Wedge-tailed
Sabrewing (2), Trop. Mock (2), Tawny-crowned
Greenlet (2), Yuc. Vireo, Fawn-br. Hummer,
Trop. Kingbird, Rufous-br. Peppershrike, Lesser
Greenlet (2), Eye-ringed Flycatcher, N. Tyrannulet,
Pipromorpha.

30 Nov.

Trip to Vallarta

Picked up Mauro at 06:30 and drove
15 km W. of Puerto Morelos to the village of
Vallarta, then continued a couple of more
km to a stand of good selva mediana
subperennifolia where Mauro mist-netted
last August. Forest here is perhaps
15-20 m tall, with many large zapotes and
other canopy trees with DBH > 50 cm.
Although Mauro referred to this forest as
a "ramonal", I saw relatively few ramón
trees, and no signs of Maya ruins.
The net grid is about 300 m N. of
the dirt road that runs from Vallarta
to Leona Vicario, ca. 2 km W. of Vallarta.

Point Survey

1984-26

Tall selva mediana subperennifolia 2 km
(by rd) W. Vallarta along road to Leona
Vicario, Quintana Roo, Mexico

Point A

HOWA (♂) *, MAWA *, WEVi *, OVEN *, AMRE (♂) *,
Great. Noddybill WP, Chachalaca, Sp-br Wren, HBWC, less Greenlet,
hummer sp.

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30 Nov Vallarta area - cont'd

Point B HOWA (♂)*, BAWW (2)*, MAWA*,
Eupidonax* sp. (not LEFC), N. Bentbill FC,
F-T Emerald, Tolmomyas, W-B Emerald,
Brown Jay.

Point C BAWW (♀)*, MAWA (2)*, AMRE (♂)*, WEVI*,
Guato. Ivorybill WP, Green Jay, FT Em ♀, N.
Bentbill FC, Wied's FC, Trop. Pewee, Vid. Trogon

Point D HOWA (♂)*, AMRE*, WEVI*, MAWA*, Spot-br
Wren, lesser greenlet (2), Brown Jay,
Hummer sp.

...

We noted a noisy troop of Spider
Monkeys (at least 6, including a female
carrying a young one) right over Mauro's
mist net grid between sites C and D.

...

We continued out the road to Leona Vicario
for another km or so, stopping to do another
series of point surveys in selva mediana
on S. side of the road. We worked our
way into the forest using hunter's trails. Forest
similar (but not quite so tall) as last site.

P.S. #1984-27

Point Survey Selva mediana 3 km (by rd) W. Vallarta on rd
to Leona Vicario, Quintana Roo, Mexico

Point A. OVEN*, BT&W (2)*, WEVI*, BAWW*, AMRE*,
MAWA (2), WOTH*, N. Bentbill, Sp-br wren, Yuc. Vireo, Lesser
Greenlet (sev.), Rose-Thr. Tanager, Gray-Thr. Chat, ^{hummer sp.} Sp. Cuckoo,

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30 Nov. Vallarta area - cont'd

Point B 2 HOWA (both ♂♂)*, N. Parula*, AMRE*, WOTH*,
Spot-b Wren (2), Hummer sp., Wedge-tailed Sabrewing,
Brown Jay (sev.), Lesser Greenlet (2 or more),
Tawny-winged WC, N. Bentbill, GFW Pecker

Point C HOWA (♂)*, MAWA*, WEVI*, BAUW*,
Green-backed Sparrow, Brown Jay (3),
Sp. Cuckoo, W-B Emerald, Myiarchus
tuberculifer, Wied's FC.

Point D HOWA (♂)*, MAWA*, WEVI*, WOTH*,
Wedge-tailed Sabrewing, N. Bentbill FC,
Red-capped Manakin, W-B Emerald,
Tawny-winged WC, Wied's FC.

...
Drove into The tiny village of Vallarta
and spent a couple of hours talking with
Don Montoya and his family. Laurie and
Mauro know this people well, and we were
made very welcome. Montoya is a man of
the forest - he loves hunting in particular,
but also gathers chicle, wild fruits, etc.
He says Mazama is common here, as well
as White-tailed Deer. He claims that there
are 2 distinct kinds of Mazama - a
small one with tiny horns and a bigger one
with larger antlers. One of the peccary
(Javali) live in the forest here, but he
says "Javali Negro" (The larger white-
tipped peccary) occurs near Puerto

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Vallarta area - cont'd

30 Nov Morelos in the "savannas" (evidently the strip of sawgrass - *Typha* marsh between the highway and the coastal strip). Tapir does not occur around here. Puma and Jaguar both do (he had killed both), as well as ocelot ("tigrillo"), margay, and jaguarundi. Two kinds of monkeys Spider ("mono araña") - he had an adorable baby spider monkey which he'd obtained by killing its mother) - and howlers, which he says are very black in color and travel in small groups of 2-5. Agouti is hunted, as well as the larger and more preferred Paca ("fepescorntle"). Guans and Turkeys are also taken, as well as such things as Coatimundis ("Tejón"). He hunts with either a single shot 16 gauge or a .22 caliber rifle. Apparently a lot of the hunting is done at night with spotlights, as many of the hunting photos he showed us featured guys wearing headlamps.

Don Jose invited me to go hunting with him any time, and I accepted with mucho gusto for the next visit.

1 Dec

Point Surveys at Mist-netting Sites 8 Km
S. Puerto Morelos - Felipe Rauch's vic.
From 0700 - 0830 we did a set of point
surveys at the Acahual Dite just S. of
Felipe Sanchez/Parricia Zugast's rancho.
Weather overcast - rain last night and
occasional drizzle in early A.M. left vegetation
wet.

Point Survey
1984-28

Acahual 6.5 Km S. Puerto Morelos via
Mex Hwy 307, Quintana Roo, Mexico

Pt. A

JCT of
net lines
DAE

Trop. Kingbird, Spot-br Wren, Habia f., Rosa-Thr
Tanager ♀, M. tuberculifer, Hummer sp., Trogon
sp., Trop. Mock., GFWP, Black-crowned Tityra,
Yell-throated Warbler*, Summer Tanager*, LEFC*,
HOWA ♀ (4. Blue-left).

Pt. B

WEVI*, HOWA ♀* (Black-L), LEFC*, Sp. Cuckoo,
C. Yellowthroat*, Blue Bunting. (Net D2)

Pt C

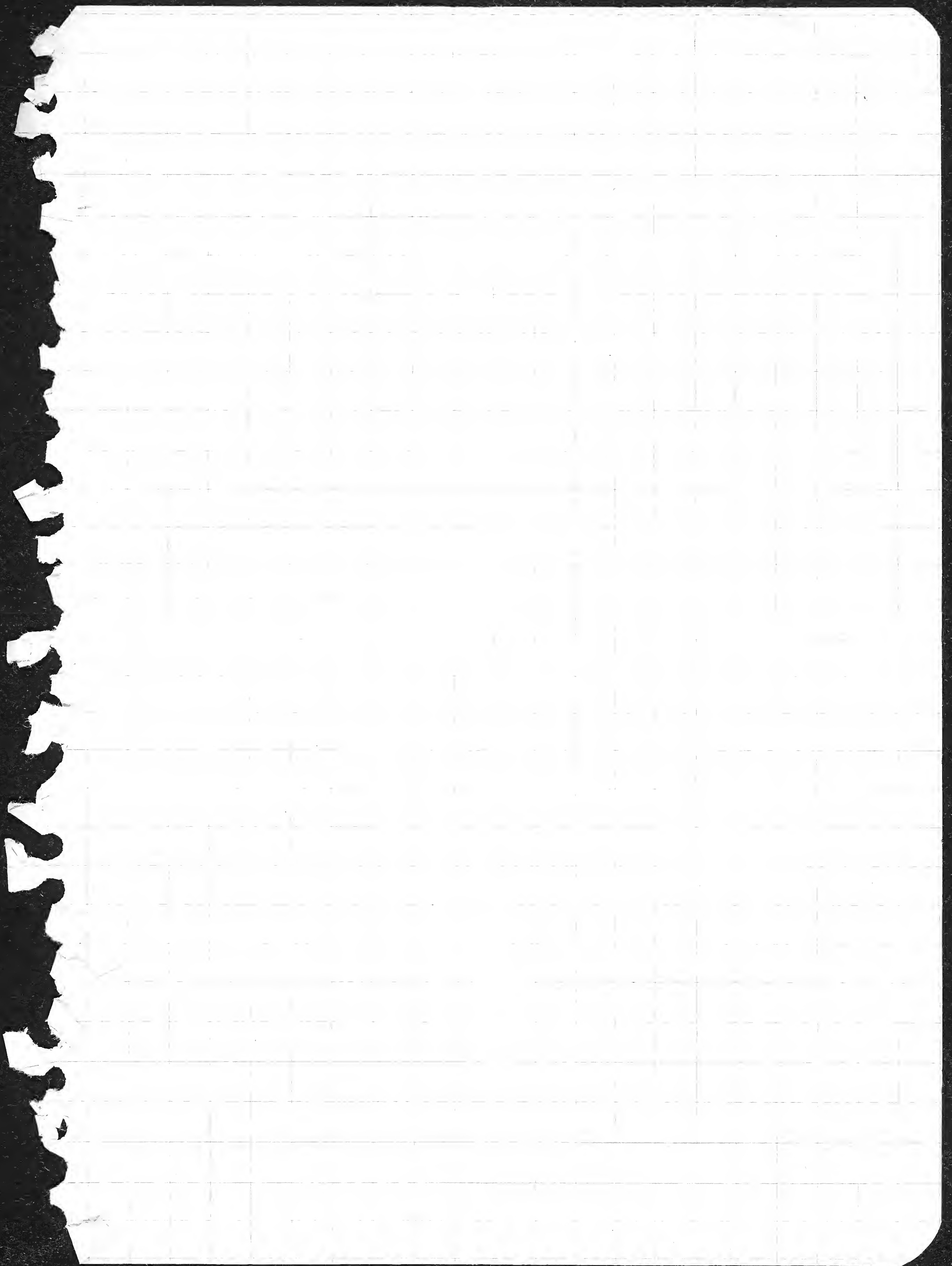
HOWA* (prob. ♀ - not seen clearly), WEVI*, MAWA*,
LEFC*, Gray Catbird*, Yuc. WP, F-T Emerald*,
Trop. Mock., Somb Vireo (2),

Pt. D

HOWA* (2 - not seen), WEVI*, LEFC*, Rosa-Thr.
Tanager, Soc. FC (3), Blue Bunting (♀), W.B. Emerald,
Spot-breasted Wren.

.....

We walked N. to Felipe's ranch, measuring
distances between net lines and plots as
we went. Vegetation pretty dry by the time we
started point surveys in Danny's plots (9:00-10:30)



Survey - forest plots - Felipe's Ranch - 1 Dec. 1987

I.

plot #9 net lane - 9A

white-eyed vireo - 2
social flycatcher
HOWA - ♂ (red-R w/ FSW-L) - 2
hummingbird sp - white-bellied emerald
rose-throated tanager
Habia f.

II.

plot #8 - SW corner at net 8B

HOWA - ♀ (red/lt. blue - R)
ruddy wood creeper
BWVA
Habia f.

white-eyed vireo - 2
least flycatcher

III.

plot #3 - at net lane 3B

Tolmomyas
Myiarchus tuberculifer
blue
bunting
lesser greenlet
ferruginous pygmy owl
faun-breasted hummingbird
Habia f.
n. bentbill
a. redstart

10:35

IV

(plot #4 - lane 4A)

MAWA

MAWA - ♂ (unbanded)

redstart - ♀

white-eyed vireo

BWVA

Habia f.

bright-rumped attila

fawn-breasted hummer

rose-throated tanager

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1984

1 Dec

Point surveys Mr. Felipe's ranch - cont'd

Point Survey
1984-29

Experimental plots in selva mediana, ca. 8 km S.
Puerto Morelos via Mex hwy 307, Y. Roo, Mexico

Pt. A
Plot #9

WEVI* (2), HOWA* (♂ Red-R, FWS band L)
Soz FC, Wh-bellied Emerald, Rose-thr. Tanager

Pt. B
Plot #8

HOWA* (♀ Red/Lt. Blue-R), BAWW*, WEVI* (2), LEFC*,
Ruddy WC, Habia f.

~~Point~~
Plot C
plot #3

Am. Redstart*, Tolmomyas, M. tuberculifer, Blue
Bunting, Lesser greenlet, Ferrug. Pygmy Owl,
Faun-br. Hammer, Habia f., N. Bentbill.

~~Point~~
Plot D
Plot #4

HOWA* (♂-unbanded), MAWA*, Am. Redstart* (♀),
WEVI*, BAWW*, Habia f., Br. rumped Attila,
Faun-br Hammer, Rose-thr. Tanager.

Biggest difference between these results of
those of netting survey was the scarcity of
Ruddy WC in the point surveys, and the incredible
abundance of this species in our capture data.
Less unexpected was the ~~greater~~ abundance
of some canopy-dwellers (e.g., Lesser greenlet,
Rose-thr Tanager, Am Redstart) in the pt. surveys
and the absence of near-absence of the same
sp. in mist-net captures.

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2 Dec.

Working along Vallarta road

Laurie & I picked up Mauro at 06:30 and drove 1.5 km W. of Jct Mex Hwy 307 on the road to Vallarta. This is the area of Tintales where Gene & I had worked extensively in October. We want to check up on the fates of some banded birds and see who invaded the five vacated territories left by the males Gene removed. We captured one unbanded class 1 female HOWA at about 20 m from the road along the main NE-trending trail system. This area formerly the territory of Green-R male, who was removed. We were unsuccessful in our efforts to capture another unbanded ♀, this one a couple of hundred meters east, in the old territory of a male (White-R) which had moved S. across the road after the resident male (DK. Blue-R) had been removed. We checked on S. side of road and found that ♂ White-R was still there. The next territory west of his is supposed to belong to a female banded Yellow-R, but we couldn't find her, nor did we have any luck with birds on the N. side of the road and west of the NE trail jct., the area that had formerly been a sercump in October.

2 Dec.

I did a series of point surveys along
The NE trail between 0700 and 8:30,
with the following results:

1984-30
Low selva mediana N. of Vallarta rd 1.5 km
W. of ct. Mex Hwy 307, (2 km SW Puerto Morelos),
Quintana Roo, Mexico

Point A (150m) HOWA* (not seen), AMRE* (♂), WOTH*, Black
Catbird, White-bellied Emerald, Chachalaca, N. Parula,
R-browed Peppershrike.

Point B (300m) 2 HOWA* (one a banded male; other not seen), WOTH*,
LEFC*, MAWA*, AMRE* (♀), Tawny-winged WC, MAB

Point C (450m) 2 HOWA* (1 ♂ - couldn't see if banded or not; other
not seen - quite far off), WEWA*, Blue-winged
Warbler*, Golden-winged Warbler*, WOTH*,
Yuc. Jay, Habia f., Yuc. Vireo.

Point D (600m) 2 HOWA* (1 unbanded ♂, 1 not seen), 2 WEVI*,
Rose-throated Tanager, Wh. Thr. Spadebill, 2 Yuc. hyp

3 Dec

Work on Hooded Warblers in Tintal area along

Vallarta Road

Laurie and I picked up Mauro at 06:40 and drove out to the same area as we worked yesterday. As before, our goal was to spot any banded thorn's in the tintal area where 5 ♂♂ had been removed, and to try to capture and band any new birds that have appeared in the study area since October. Weather very still, humid, fairly warm. Muchos mosquitos, and bird activity fairly low. We got no response or see to playbacks near the little dried up aguada N. of the road where we'd seen an unmarked ♀ day before yesterday (old territory of ♂ white-right). We left a net set up there and spent a couple of hours beating the bushes for other birds. We couldn't find female white-R, although we did hear a couple of faint clips from an area that may have (hardly) been within her territory - more likely, it was the ♀ (lt. blue/pink) we banded yesterday. We worked our way W. along the N. side of the Vallarta rd, past the main diagonal trail and the now-dry tintal, past the patch of woods from which a ♂ had been removed, to the second tintal, which is now essentially dry. No responses

J. F. Lynch
1984

3 Dec to playbacks anywhere along here. Though we must have gone through the territories of at least 3 (probably 4) birds. We followed the scrubby arc of acacia-tintal vegetation from the second tintal North and east around the patch of tall selva, to The Point ~150m N. of the road where an unbanded ♂ had been removed in October. Here we finally got a response - an unbanded ♂ HOWA - and after some effort we finally netted and banded him (Right leg - Lt. Blue / Pink; left leg - FWS #118-33300). The point where we captured this bird was ~20m N. of the spot where the old ♂ was removed, and our new bird flew that far S. of the net, although his main territory appeared to be in the taller ~~forest~~^{upland} forest N. of the Capture Point. We continued working our way ENE around the band of thorny scrub (apparently the area is flooded for at least a few months of the year), and finally caught a glimpse of one of our previously banded birds, female Red/or-R. She was well within her old territory, but we had too short a look at her to know whether the territorial boundaries have changed substantially since October.

We moved to the S side of the

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1984

Vallarta Road - cont'd

3 Dec

road to look for banded (or new) birds, but got no responses from the two territories w. of the white-R male we spotted yesterday. Finally, we went back to check the net we'd left set, and found not one but two HOWA - one the class 1 ♀ we'd been trying to catch, the other an unbanded ♂. We banded them both (♀: White/Chart-right, FWS# 118-33297 left; ♂: Chart/Red-right, FWS# 118-33296 left). We also had a Black-and-white warbler (FWS# 118-33295 left). The net also contained a Rose-throated Tanager and 2 Habia fuscicauda, which we released unbanded. Earlier, while we played the HOWA tape under the net, we had captured & released an Ivory-billed Woodcreeper. Not a bad score for less than 4 hours.

* = migratory species
L = life species

Birds observed 9 October - 4 Dec 1984
(all in Quintana unless otherwise indicated)

- | | |
|-----------------------------------|----------------------------|
| 1. Thicket Tinamou | 28. Gray Hawk |
| 2. Brown Pelican | 29. Roadside Hawk |
| 3. Double-crested Cormorant | 30. Laughing Falcon |
| 4. Olivaceous Cormorant | 31. Collared Forest Falcon |
| 5. Magnificent Frigatebird | 32. Bat Falcon |
| 6. Great Blue Heron | * 33. Merlin |
| 7. Common Egret | * 34. American Kestrel |
| 8. Snowy Egret | 35. Plain Chachalaca |
| 9. Little Blue Heron | 36. Great Curassow |
| 10. Reddish Egret | 37. Yucatan Bobwhite (Yuc) |
| 11. Louisiana Heron | 38. Limpkin |
| 12. Cattle Egret | 39. Gray-necked Wood Rail |
| 13. Green Heron | 40. Northern Jacana |
| 14. Yellow-crowned Night Heron | * 41. Black-bellied Plover |
| (L) 15. Bare-throated Tiger-Heron | * 42. Semipalmated Plover |
| 16. Wood Stork | * 43. Kildeer |
| 17. White Ibis | * 44. Greater Yellowlegs |
| 18. Roseate Spoonbill | * 45. Willet |
| * 19. Blue-winged Teal | * 46. Spotted Sandpiper |
| * 20. Northern Shoveler | * 47. Ruddy Turnstone |
| 21. Turkey Vulture | * 48. Least Sandpiper |
| (L) 22. Yellow-headed Vulture | * 49. Pectoral Sandpiper |
| 23. Black Vulture | * 50. Semi-palmated S. |
| * 24. Osprey | 51. Black-necked Stilt |
| 25. White-tailed Kite | * 52. American Avocet |
| (L) 26. Crane Hawk | 53. Laughing Gull |
| 27. Common Black Hawk | 54. Royal Tern |

Mexican Birds - cont'd

- | | | | |
|---------|----------------------------------|---------|---|
| 55. | Sandwich Tern | 83. | Blue-crowned Motmot |
| 56 | Rock Dove | (L) 84. | Russet-crowned Motmot
<small>(P. Oaxaca)</small> |
| 57. | Red-billed Pigeon | 85. | Keel-billed Toucan |
| (L) 58 | Short-billed Pigeon | 86 | Collared Araçari |
| 59 | Common Ground Dove | 87. | Lineated Woodpecker |
| 60 | Ruddy Ground Dove | 88. | Yucatan Woodpecker |
| 61. | Blue Ground Dove | 89. | Golden-fronted WP |
| 62. | White-tipped Dove | *90. | Yellow-bellied Sapsucker |
| 63 | Ruddy Quail Dove | 91. | Ladder-backed WP |
| 64 | Aztec Parakeet | 92. | Guatemalan Ivorybill |
| 65. | Yellow-lored Amazon | 93. | Tawny-winged Woodcreeper |
| 66. | Yucatan Parrot | 94. | Ruddy WC |
| * 67. | Yellow-billed Cuckoo | 95. | Olivaceous WC |
| 68. | Squirrel Cuckoo | 96. | Ivory-billed WC |
| 69 | Groove-billed Ani | 97. | Barred WC |
| 70. | Ferruginous Pygmy Owl | 98. | Barred Antshrike |
| 71. | Vaux's Swift | 99. | Red-capped Manakin |
| 72. | Wedge-tailed Sabrewing | 100. | Bright-rumped ATtila |
| 73. | White-bellied Emerald | 101. | Masked Tityra |
| 74. | Fork-tailed Emerald | *102. | Scissor-tailed Flycatcher
<small>abund. Ocoacuatla, Chi.</small> |
| 75. | Cinnamon Hummingbird | 103. | Tropical Kingbird |
| 76 | Fawn-breasted Hummingbird | 104. | Boat-billed FC |
| (L) 77. | White-eared Hummingbird (Oaxaca) | 105 | Social FC |
| 78. | Citrine Trogon | 106. | Great Kiskadee |
| 79. | Vidaceous Trogon | 107. | Brown-crested FC |
| 80. | Mexican Trogon (Chiapas) | 108. | Yucatan FC |
| * 81. | Belted Kingfisher | 109. | Dusky-capped FC |
| 82. | Green Kingfisher | 110. | Tropical Pewee. |

- | | | | |
|---------|---|------------|--------------------------------|
| *111. | Least Flycatcher | (L) 138 | Brown-backed Solitaire (Chis.) |
| 112. | Northern Royal-Flycatcher | 139. | Blue-gray Gnatcatcher |
| 113. | White-throated Spadebill | 140. | White-lored Gnatcatcher |
| 114. | Yellow-rive Flycatcher | 141. | Tropical Gnatcatcher |
| (L) 115 | Common Tody Flycatcher | 142. | Loggerhead Shrike |
| 116 | Northern Beuthill | 143. | Rufous-browed Peppershrike |
| 117 | Caribbean Elaenia | * 144. | White-eyed Vireo |
| 118 | Mangrove Swallow | 145. | Scrub Vireo |
| * 119 | Barn Swallow | * 146. | Red-eyed Vireo |
| * 120 | Purple Martin | 147. | Yucatan Vireo |
| 121 | Rough-winged Swallow | * 148. | Philadelphia Vireo |
| 122. | Common Raven (Oax.) | 149. | Tawny-crowned Greenlet |
| 123. | White-throated Magpie Jay
(Chis, Oax.) | 150. | lesser greenlet |
| 124 | Brown Jay | 151. | Bananaquit |
| 125 | Green Jay | * 152 | Black-and-White Warbler |
| 126 | Yucatan Jay | * 153. | Swainson's Warbler |
| 127 | Steller's Jay (Oax, Chis.) | * 154. | Worm-eating Warbler |
| 128. | Yucatan Wren | (L) * 155. | Golden-winged Warbler |
| 129 | Carolina Wren | * 156 | Blue-winged Warbler |
| 130 | Spot-breasted Wren | * 157. | Tennessee Warbler |
| 131 | Tropical House Wren | (L) * 158 | Nashville W. (Putla, Oax.) |
| 132 | White-bellied Wren | * 159 | Northern Parula |
| 133 | Tropical Mockingbird | * 160. | Yellow Warbler |
| 134. | Black Catbird | * 161. | Magnolia Warbler |
| * 135 | Gray Catbird | * 162. | Cape May Warbler |
| 136 | Clay-colored Robin | * 163. | Black-throated Blue W. |
| * 137. | Wood Thrush | * 164. | Black-throated Green W. |
| * 137 | Swainson's Thrush | * 165. | Yellow-throated W. |

- | | | | |
|---------|--------------------------------|--|-------------------------------|
| *166. | Chestnut-sided Warbler | 194 | Red-throated Ant-tanager |
| #167 | Palm Warbler | 195 | Gray-headed Tanager |
| *168 | Ovenbird | 196. | Black-headed Saltator |
| #169 | Northern Waterthrush | 197 | Cardinal |
| *170 | Kentucky Warbler | *198 | Blue Grosbeak |
| *171 | Hooded Warbler | *199 | Indigo Bunting |
| *172 | Comm. Yellowthroat | *200 | Painted Bunting |
| 173 | Gray-throated Chat | 201 | Blue Bunting |
| *174 | Yellow-breasted Chat | *202 | Rose-breasted Grosbeak |
| *175 | Wilson's Warbler (Oax., Chis.) | 203 | White-collared Seedeater |
| *176 | American Redstart | 204. | Green-backed Sparrow |
| 177 | Painted Redstart (Chis.) | 205. | Olive Sparrow (Oax.) |
| 178 | Yellow-winged Cacique (Oax.) | 206 | Yellow-eyed Vireo |
| 179. | Yellow-billed Cacique | 207. | Lesser Roadrunner (Yuc) |
| 180 | Great-tailed Grackle | 208. | Great Crested Flycatcher |
| 181 | Melodious Blackbird | 209. | Altamira Oriole |
| *182 | Orchard Oriole | 210. | Least Grebe |
| 183 | Black-crowned Oriole | 211. | Northern Beardless Tyrannulet |
| 184 | Hooded Oriole | 212. | Ochre-bellied Flycatcher |
| (L) 185 | Yellow-tailed Oriole | Black-crowned Tyrannulet Tyrannulet | 213. |
| 186 | Yellow-backed Oriole | 214. | Yellow-faced Grassquit |
| 187. | Orange Oriole | 215. | Herring Gull |
| 188 | Red-winged Blackbird | | |
| 189 | Scrub Euphonia | | |
| 190 | Yellow-throated Euphonia | | |
| *191 | Summer Tanager | | |
| 192 | Rose-throated Tanager | | |
| 193 | Red-crowned Ant Tanager | | |

J. K. Lynch
1984

Salamander Trip - Leg

1 Nov. En route Merida to Tuxtla Gutierrez via Oaxaca
lv. Merida 06:55; arrive Tuxtla 12:50

779.4 "Hotel Flamboyant", Tuxtla Gutierrez
Leave at 14:45 to look for Bolitoglossa
north of town.

84.5 Turn off Pan-Am Hwy N. to Chicoasen (48 km)

88.0 "T" JCT - go left toward Chicoasen

93.9 Viva Cardenas

96.7 San Fernando bypass

807.9 bananas growing on flood plain across stream W. of
road

Sta. 1 Banana grove W. ^{side of} road from Tuxtla Gutierrez to
Chicoasen, 11.2 km (by rd) N. San Fernando,
Chiapas, Mexico

18 Bolitoglossa rufescens (or occidentalis)

~809.2 - tunnel

810.2

811.8 Chicoasen

39.3

Sta. 2 Cafetal on dirt rd. JUST W. of
San Fernando (Ran N. Tuxtla
Gutierrez), Chiapas, Mexico
3 B. occidentalis-rufescens

39-8

JCT. w. paved road between Tuxtla and
Chicoasen

52.3

JCT Pan Am Hwy (Tuxtla)

974.5

10.2 Km N. Chamula on road to ~~Larraiz~~^{La},
Chiapas, Mexico (2220 m)

1 B. hartwegi - in dirt bank of road cut
(1 Sceloporus malacoticus-type seen - not taken)

976.3

8.4 Km N. Chamula on road to Pantelha, Chiapas,
Mexico (2,200 m elev.)

1 B. resplendens
2 B. hartwegi } in dirt bank along trail
above road

Scorpions extremely abundant here - under
loose rocks at base of ledge I saw ~12.

985.0

Chamula

988.3

Juc. Tinaca Han

2 Nov.
869.2

Hotel Hambogant - 500 m

879.6

Choss River - 390 m

946.1

herpleyden's site - 2310 m

San Cristobal - 2050 m = 2113

953.8

"

961.0

Junc. Zinacatan - Chamula

969.7

Junc. Chamula - Pantelho Rd.

970.6

6.4 km (by rd) N. Chamula along road to Pantelho,
Chiapas, Mexico (2310 m. elev.)

Sta. 1

6 Bolitoglossa resplendens

4 B. hartwegi

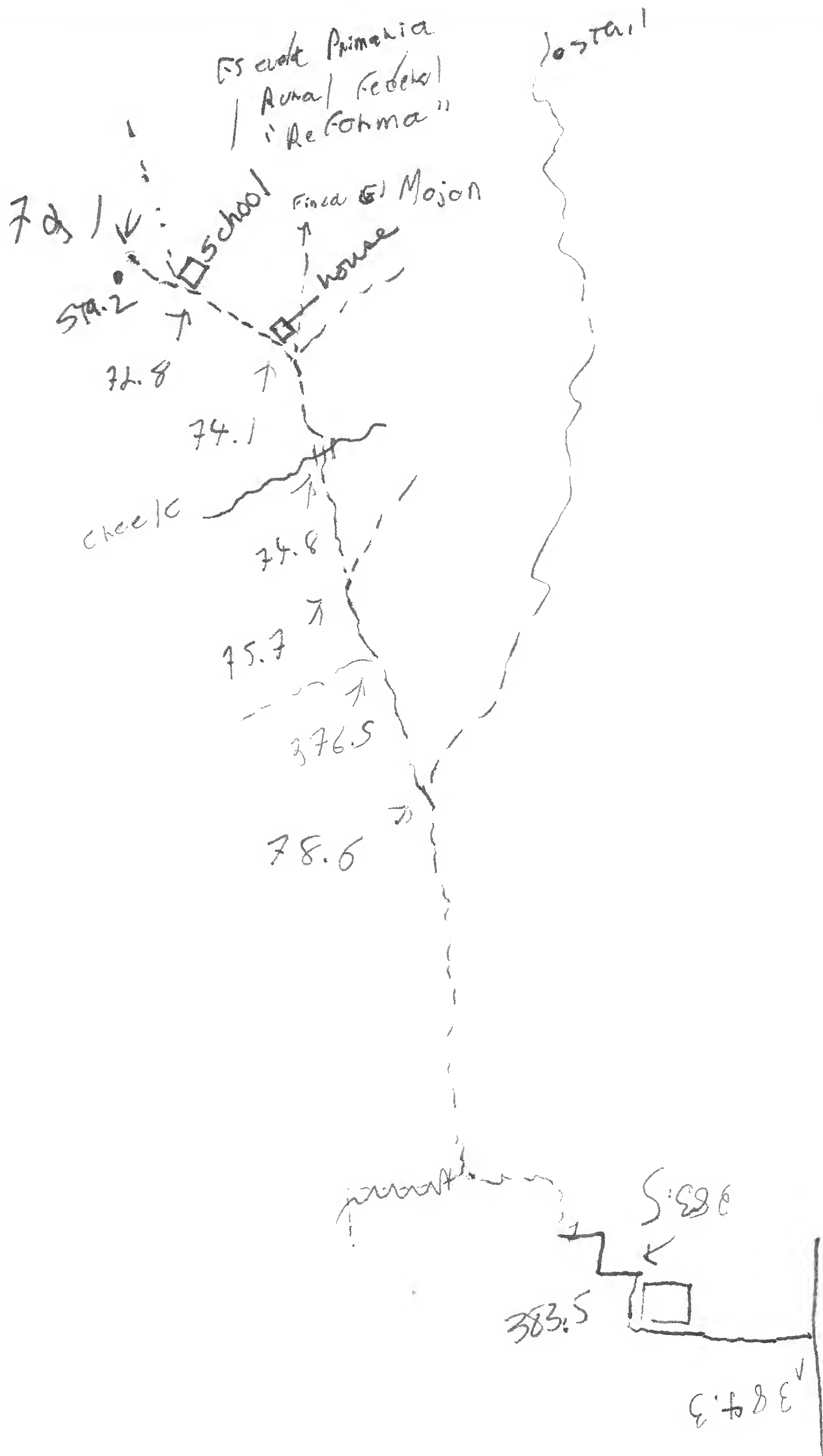
all dug out of dirt bank along side of a wide side trail cutting uphill W. of the main road. Bank somewhat shaded by overhanging vegetation, and maintaining cover of moss, lichens, etc. in area where most salamanders were found. Dirt is a yellowish clayey ash (I think); often forms large jointed clods and chunks, ~~which~~ which can be easily pried loose with a rake or pick. All resplendens here have solid red dorsal pattern (unlike San Marcos material).

Larrainzar - red tapetes

Chenalhó - black coarse wool tapete

Zinacatlán - yellow ^{cape} cotton and fine
black ~~tapete~~ capes

3 Nov. Looking for B. occidentalis-rufescens w. of Tuxtla
 094.2 Starting Kilometrage - Hotel Fleuryant - Pan Am Hwy
 110.8 Berrizabal Junction (new bypass)
 118.5 airport exit
 123.7 Ocozocoautla (850m elev.)
 153.9 Rio La Venta ^(525m) - turn back toward
 Ocozocoautla
 169.4 turn back to take side road N. To "El
 Aguacero" a scenic waterfall, picnicking,
 and cave area.
 170.8 turnoff to El Aguacero
 173.6 parking area at caves ~ 500m above valley
 176.5 Jct. W. Mex 190
 192.0 Ocozocoautla (W. end of town) Jct. with rd. N. to
 Malpaso (870m elev.) 11:20 A.M.
 Apizac is 50 km away
 209.0 moist forest starting (1025m)
 210.3 Parqueo Educativo Laguna Belqica
 (850-900m elev. & 1400mm rainfall)
 211.6 Chepopote
 212.7 first small patch of bananas (980m)
 219.3 1 rufescens, 1 B. mexicana (775m)
 221.0 turn around (710m)



4 Nov.

Berriozabal area looking for Bditoplossa

344.1

Berriozabal

~~760 m~~ 920m

349.2

Junction

353.4

pass into wet forest ~~H 75 m~~ 1235

357.3

head ends

¹⁰⁷⁰
H 10 m

turn back

358.1

Stop in cafetal with a few bananas
planted in shallow sink hole - (H 40 m) ¹⁰⁰
1 B. rufescens

Sta. 1

365.4

Junction

370.0

Finca El Mojón

372.1

Cafetal with many bananas

Sta. 2

13 B. occidentalis and/or rufescens

16.8
5.8

9.0

Copainala

5 Nov.

Trip to ~~Chico~~ ~~Siwojote~~ area via Chicoasen

485.8

leave Tuxtla

524.5 ~~522.1~~

Chicoasen Dam over Grijalva

530.0

bank at dam

535.2

~~Coahuana~~ Town on R. (260 m)

543.8

rd. goes along narrow hogback separating Grijalva canyon on W. from another drainage to E. (830m elev)

549.5

stopped at small isolated patch of bananas - valley (640m)

552.7

La Nueva

562.1

Copainala (460 m)

569.5

first few pines (860 m)

577.4

stop in steep cafetal area in evergreen forest (1380 m)

Sta. 1

15.3 Km (by rd) ENE Copainala along road to Coapilla, Chiapas, Mexico (elev. 1380 m) - cafetal w. bananas

12 Bolitoglossa rufescens

(also: several Wilson's Warblers, MAWA, BTGW, OVEN)

580.7

off rd to ~~Cholotepec~~ (1580 m) ~~Coapilla~~

585.8

^{Coapilla}
~~Cholotepec~~ (1620 m)

591.0

(1825 m) turned right (uphill) at fork in road

595.5

first tree ferns 2100 m

597.5

end of present road (bulldozers working) 2200 m elev.

cloud forest-like vegetation but no good bromeliads. Searched (mostly in the rain) for about 1/2 hr., but found only 2

Suave:

Cloud-forest along new road from Coapilla to Panteppec,

16.8 Km (by rd) ENE Coapilla (35.4 Km ENE Copainala),

Chiapas Mexico (elev. 2200m) 2 Rhadinea sp.

603.3 Turned back toward ~~Cap~~ Coapilla at 1445 amidst
a steady downpour. Stopped in area of pine-oak
forest: 5.8 km down from end of road (1880m).
1 B. rufescens under bark of log

604.0 ✓CT. (again)

609.0 crest on rd N to Ocotepel (1880m)

613.2 Turn back - road too muddy (1660m)

Pine-oak-lipo

6 NW Oaxaca
758.3 Ca cumóde h 680 m

776.0 loading camp

776.3 Junction

778.1 stop 4 Trochilus h 965 m

782.0 2900m 1 Psawitla in road cut - heavy lichen area

787.5 Ca cumóde h 6

7 NW. Sierra

872.2 turn off to Sta Inez from Zaachila (1480m)

886.1 Pinos start (2110m)

896.6 Jct. rd to Contreras Peñoles (25) and San Mateo Tepantepec (25) (2710 m elev.)

905.0 Saddle between ridges (2470m)

914.3 San Miguel Pera (2060m) - turn back 1330

923.1 turn onto logging rd. (2460m elev)

930.4 Summit (turn around) (2740m)

White-eyed hummers, White-eyed Juncos common

937.6 Jct. of logging rd w. rd to Pera

942.0 high point (2740m)

44.7

Pine-bunchgrass area

(belli locality?)

2750m

8 Nov	En route Oaxaca - Putla
989.6	Mileage at hotel in Oaxaca
037.5	2030 m pass
039.7	La Carbonahia
043.6	2170 main summit
046.5	2270 Final summit
097.9	Nochistlan (2000m) Kestrel seen in town
127.8	Junc. Tlaxioca 2300 m
188.1	Tlaxioca 2020
194.3	lunch stop along deep limestone stream with Manteguma cypresses (1950m) - collected 2 stones
204.5	2140 m pass
216.3	2440 pass
232.0	San Tráche Chicahuaxtlan - huipiles (2400m) <small>(Indians: "Trické")</small>
256.8	Bananas 1220 m
279.7	Putla (750m)

339.1

River - Rio de los niños ~~in~~ incueros (250m)

345.1

Patla

366.0

1 Brietti in capital (1240m)

10 Oct Nov

Oaxaca - 638.1

Diaz on bar ^{prev.} 668.9 1620m

" 675.7 1700m

697.6

668.9

28.1

First Summit 688.8 2580M

Second Summit 696.5 3110m

Cuayamojiles 697.0 3090

Sta. 1

2 Thonius 700.6 3040m

Junction 707.9 2980m

turned left

Sta. 2 706.2

1 Thonius - Pine-oak-madure-fir (2920m)

707.3 Tehu ~~2980~~ 2890m

709.8 junction

712.8

Hano Grande (3000m) - take left fork toward Cojonas

717.6

Summit 3140M

718.6

new summit 3180m

Sta. 3

720.7

Prev. 3080M - Sta 3

Sta 4

723.9

3160M - Sta 4 1 Thonius

729.0

Hano Grande

739.4

Cuayamojiles