

Identifications (Materials, bones, etc.)

Rain Record, 1935-7

State of Excavations, 1937

Query Sheets, Programs (field work)

Mailing Lists \*PN Papers etc.

Plaza trench

- L-16-591 - W-1-6 - fragment of deer long bone  
L-16-627 (W-1-8) " of " " " "  
L-16-591 (W-1-22) Deer, proximal end of radius  
L-16-615 (W-1-28) " " " " "  
L-16-591 (W-1-22) Radius of peccary  
L-16-591 (W-1-22) Deer, distal end of femur, lacking epiphysis  
L-16-697 (W-1-31) Deer, distal end of humerus  
L-16-706 (W-1-33) Deer, head of scapula

Plaza Camp Plaza Pit

~~Esixz~~

~~Ms2s4zxxzxx~~

- L-17-339 (M-2-4) Deer, distal end of femur (cut off)

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L-16-199 ( ) Deer, distal end of femur

L-16-199 ( ) Fragment of deer bone.

Burial #2 (SE Section, Group LX11)

~~Sxx~~

SE-1-1 Bones of a small mammal, not identifiable as to species.

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L-16-350 ( ) Bones of small bird, not parrot, not turkey.

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L-17-97 ( ) 2 fragments, one of lower jaw, one of pelvis,  
species not identifiable.

L-16-757 ( ) Not identifiable ( turtle ? ? ? ); mammal ? ? ? )

PHILADELPHIA  
UNIVERSITY of PENNSYLVANIA  
THE UNIVERSITY MUSEUM

2nd copy

Piedras Negras Exped., 1932 - Shell for identification.

Academy  
1932

- x ✓ L-27-50 Bi-valve shell
- x ✓ L-27-52 Bivalve shell, 2 pieces.
- x ✓ L-27-80 Bi-valve shell
- x ✓ L-27-44 Perforated plates cut from bivalve shell (6 plates).
- x ✓ L-27-39 Fragment of shell
- x ✓ L-27-78a Small figuring cut from shell
- x ✓ L-27-78b Small ornament " " "
- x ✓ L-27-78c Small piece of shell (cut out).
- x ✓ L-27-79 Three shell fragments. (1 lost).
- x ✓ L-27-51 Two fragments of bivalve shell (Academy)
- ✓ L-27-49 Bivalve shell (W-17-40-a) - presented to Academy (Dr. Pillsbury).
- x ✓ L-27-57 Small fragment of shell.
- x ✓ L-27-40 Two pendants cut from small univalve shells, one broken.
- x ✓ L-27-152 Large univalve shell, with two perforations.
- x ✓ L-27-5 Match-box containing shell fragments.

Dr. Pillsbury's identifications: above or below:

- x ✓ L-27-40 Morum tuberculatum (Sowb.) (the unbroken one) - A: Marine shells from West Coast of Mexico or Central America ("Panamic Province" shells range from Panama to Gulf of California)
- ✓ L-27-29 (99)
- ✓ 39
- ✓ 41
- x ✓ 52 limbatus
- ✓ 78, a, b, c Spondylus princeps Brod.
- ✓ 79
- ✓ 80
- x ✓ L-27-50 Spondylus princeps Brod. (our "thorny oyster") - See note A
- x ✓ L-27-49
- ✓ 51 B: Fresh water, Guatemalan species
- ✓ 57
- x ✓ L-27-152 Pomacea ghiesbreghti (Reeve) also called "Ampullaria" - See note B.
- ✓ L-27-5 Pomacea, fragments of an immature shell, species not determinable, same as preceding.
- x ✓ L-27-40 Pachycilus indiorum (Morelet) - the broken one - note says - See note B. native of Guatemala.

Returned, OK  
J.S.

MB - Notes on provenance from letter of Dr. Pillsbury, Oct. 29, 1932.

Shell for Identification

Johnson Expeditions  
University Museum.

Accelany,  
1922

Nov. 3, 1932.

- ✓ L-16-16 (E-1-11) 1 univalve shell (cut?) *Lithopoma tuber* (L.) - gulf or Caribbean
- ✓ L-16-17 (E-1-11) 1 shell ? *Vermicularia spirata* (Phil.) " "
- ✓ L-16-36 (E-1-22) 1 inivalve shell "*Pomacea flagellata tristrami* (C+F) - fresh water, probably local."
- ✓ L-16-347 (E-1-109) part of bi-valve *Arca umbonata* Lam. - gulf or Caribbean
- ✓ L-16-380 (E-1-122) 1 piece coral? "Coral, species undetermined."
- ✓ L-16-773-a (W-1-40-f) Fragmentary univalve shell <sup>not identified - probably snail.</sup> ~~Gulf or Caribbean~~
- ✓ L-16-773-b " Fossil univale - "undetermined cost of a gastropod." g. or Carb.
- ✓ L-17-176 (SE-1-19) Fragment of conch? "*Strombus*, species uncertain" " "
- ✓ L-27-155 (fire) Bivalve shell (burned) *Cardium robustum* Sol. " "
- ✓ L-16-768(W-1-40-e) 3 spines, 1 in match-box with 2 fish-vertebra(?).
- ✓ L-16-348 (E-1-109) 1 spine
- ✓ L-17-122 (SE-1-10) 1 spine
- ✓ L-17-405-a (E-1-?) 4 spines?
- ✓ -b
- ✓ -c
- ✓ -d
- ✓ L-27-81-a (E-1-154) 1 spine.
- ✓ L-27-46-a to J incl Spines with hieroglyphs.
- ✓ L-27-46-k to w Spines.
- (W-17-49.)

Mr. Fuler, our ichthyologist tells me that it is not possible to say definitely even the family of the species to which belonged these spines. They are clearly sting ray spines but may represent species of several different families. The differential characters are not evident in the spines.

J.A.G.R.

Desired information: species; habitat.

Jan 2, 1933  
all returned  
ok. J.A.G.R.

Academy  
1932

Memorandum list of bones for identification:

- L-16-769 ( W-1-40ε ) Phalange - jaguar, <sup>?</sup> certainly cat - see note on L-27-58
- L-27-45 ( W-17-85 ) Carved Moan effigy. "Proximal portion of the ulna of a jaguar!"
- L-27-58 ( W-17-40-i ) 4 phalanges & bird claw? - <sup>Probably all jaguar toe-bones - certainly large cats and the majority too large for anything but jaguar.</sup>
- L-27-60 ( W-17-17 ) 2 phalanges? ("?" )
- L-27-61 ( W-17-30 ) phalange? - "bird bone"
- L-27-62 ( W-17-31 ) " ? - "?"
- L-27-63 ( W-17-80 ) tooth - "incisor of one of the larger cats, probably jaguar."
- L-27-64 ( W-17-89 ) phalange? - jaguar? <sup>?</sup> certainly cat - see note on L-27-58.
- L-27-65 ( W-17-90 ) " ? " ? "
- L-27-66 ( W-17-90 ) 2 phalanges? - <sup>bird bones.</sup> "Turtle - probably a soft-shelled turtle (Trionyx)"
- L-27-186 ~~XXXXX~~ ( S-1-10 ) 28 bone fragments Peccary, species not determinable, including teeth.
- L-27-187 ( S-1-21 <sup>29.</sup> ) 19 pieces, bone fragments & teeth typewriter. - <sup>mid. - "hoofed animals, probably"</sup> Peccary (Odocoileus species?) - long bones and long bones of deer(?).
- L-27-192 ( S-8-2 ) 1 bone fragment - "section of human radius."
- L-27-193 ( S-8-4 ) 5 bone fragments & 1 phalange? - Ungulate, probably deer (Odocoileus).
- L-27-194 ( S-12-1 ) 1 bone fragment. "?"

Desired information: species, any possible information as to age, parts of animal represented;

(Over)

Jan 12, 1933  
All items OK.  
J.S.

Add the following to list on the other side:

- ✓ L-27-185 ( S-2-28 ) 5 fragments (human?) - Human femur { Lower left jaw of  
opossum, species  
"Pidelphis"
- L-27-188 ( S-1-41 ) 1 part of small mandible, with teeth.
- ✓ L-27-189 ( S-2-13 ) 3 fragments - "Large fragment end of humerus of deer (Odocoileus)  
the others not identified.
- ✓ L-27-190 ( S-2-23 ) 10 fragments "Probably old deer - species Odocoileus)
- ✓ L-27-19b ( S-7-1;3-6 ) 13 fragments, incl. part of  
S-7-9 ) skull, phalanges, &c. - felis?
- end of peccary humerus.
  - Deer - "Odocoileus species."
  - portion of pelvis
  - calcaneum (heel-bone) "
- 4 sitting fragments, "human cranium"  
(frontal bone, showing supra-orbital  
ridge and marked deformation (fattening).

Shell for Identification

Johnson Expeditions  
University Museum.

Nov. 3, 1932.

1931

C&F;  
~~XXX~~

OK

1931

- L-16-16 (E-1-11) ✓ 1 univalve shell (cut?) Lithopoma tuber (L) from Gulf of Mexico or Carribean.
- L-16-17 (E-1-11) ✓ 1 shell ? Vermicularia spirata (Phil.)
- L-16-36 (E-1-22) ✓ 1 inivalve shell Pomacea flagellata tristramia fresh water, probably local.
- L-16-347 (E-1-109) ✓ part of bi-valve Arca umbonata Lam. from Gulf of Mexico or Carribean.
- L-16-380 (E-1-122) ✓ 1 piece coral? Coral, species undeterminable.
- L-16-773-a (W-1-40-f) ✓ Fragmentary univalve shell (not identified (snail?))
- L-16-773-b " ✓ Fossil univale Cast of undeterminable gastropod, from Gulh of Mexico of Carribean.
- L-17-176 (SE-1-19) ✓ Fragment of conch? Strombus, species uncertain.
- L-27-155 (fire) ✓ Bivalve shell (burned) Cardium robustm Sol., from Gulf of Mexico or Caribbean.
- L-16-768(W-1-40-e) ✓ 3 spines, 1 in match-box with 2 fish-vertebra(?).
- L-16-348 (E-1-109) ✓ 1 spine
- L-17-122 (SE-1-104) ✓ 1 spine
- L-17-405-a (E-1-?) ✓ 4 spines?
- b
- c
- d
- L-27-81-a (E-1-154) 1 spine.
- L-27-46-a to J incl Spines with heiroglyphs.
- L-27-46-k to w Spines.
- (W-17-49.)

Sting ray, family or species not determinable.

Desired information: species; habitat.

Memorandum list of bones for identification:

- L-16-769 ( W-1-40-e ) ← ~~phalange~~ Jaguar? Certainly large cat.
- OK ✓ L-27-45 ( W-17-85 ) ← Carved Moan effigy. Proximal portion of ulna of a jaguar.
- OK ✓ L-27-58 ( W-17-40-1 ) ← 4 phalanges & bird claw? Probably all jaguar toe-bones: certainly large cat, some too large for anything but jaguar.
- OK ✓ L-27-60 ( W-17-17 ) ← 2 phalanges? <sup>not determinable</sup>
- OK ✓ L-27-61 ( W-17-30 ) ← phalange? Bird bones.
- OK ✓ L-27-62 ( W-17-31 ) " ? Not identifiable.
- OK ✓ L-27-63 ( W-17-80 ) ← tooth Tooth of one of the larger cats, probably jaguar.
- OK ✓ L-27-64 ( W-17-89 ) ← phalange? Jaguar? Certainly large cat.
- OK ✓ L-27-65 ( W-17-90 ) ← " ? ~~xBird bones~~ Not determinable.
- OK ✓ L-27-66 ( W-17-90 ) ← 2 phalanges? Bird bones
- OK ✓ L-27-186 ~~xxxx~~ ( S-1-10 ) ← 28 bone fragments Turtle, probably soft-shelled (Triony x); Peccary bones & teeth, species not determinable; long bones of deer (?); misc. bones, probably of hoofed animals.
- OK ✓ L-27-187 ( S-1-21 ) ← 19 pieces, bone fragments & teeth typewriter. Deer, species *Odocoileus* (?); and Peccary (species not determinable)
- OK ✓ L-27-192 ( S-8-2 ) ) 1 bone fragment Section of human radius
- OK ✓ L-27-193 ( S-8-4 ) ) 5 bone fragments & 1 phalange? Ungulate, probably deer (*Odocoileus*)
- OK ✓ L-27-194 ( S-12-1 ) ) 1 bone fragment. Not identifiable.

Desired information: species, any possible information as to age, parts of animal represented:

Received back Jan 12, 1933.

OVER

Add the following to list on the other side:

- OK / L-27-185 ( S-2-28 ) 5 fragments (human?) Human femur.
- OK ✓ L-27-188 ( S-1-41 ) 1 part of small mandible, with teeth. Lower left jaw of Oryzomys, species Didelphis.
- OK ✓ L-27-189 ( S-2-13 ) 3 fragments Large fragment from humerus of deer (species Odocoileus); others undeterminable.
- OK ✓ L-27-190 ( S-2-23 ) 10 fragments Probably old deer, species Odocoileus.
- OK ✓ L-27-19b ( S-7-2;3-6; S-7-9 ) 13 fragments, incl. part of skull, phalanges, &c.-felis?

End of peccary humerus; portions of pelvis and calcaneum (heel-bone) of deer (species Odocoileus); and 4 fragments (restored) of human cranium. N.B. The cranium shows supracorbital ridge and pronounced flattening of the frontal bone.

7m1 Coby  
Academy,  
1932

Stone and minerals for identification.

- 1 small piece of hematite. (from mosaic mirror). "Pyrite, altered on surface to limonite"
- L-27-22 Jade bead "Jade"
- L-27-27 Jade object "Jade"
- L-27-31 String of Jade beads "Jade (Picroside density of 3.28)"
- L-27-34 Match-box containing three small pieces of worked jade. "Jade"
- L-27-36 String of beads (turquoise??) "Feldspar variety microcline"
- L-27-23 One "plug" (M). "amazonstone"

Central American Jades are properly  
Picroside-jadeite.

analysed by  
Mr. Gordon, probably destroyed in process.

Identifications above by  
Dr. S. . . . A. Gordon,  
Academy.

P.C. 1932

Nov. 10, 1932.

2nd Memorandum List of Stone & minerals  
for identification.*Academy  
1932*

L-27-4 (W-6-21-f) Serpentine

L-27-6-a (W-6-21-h) Calcite  
-b

L-27-53 (W-17-76) a weathered limestone (my "copal")

L-27-89 (W-28-7) chert knife

L-27-94 (S-1-30) chert knife

L-27-95 (S-1-31) flint ("spearhead")

L-27-97 (S-1-42) Chert hammerstone.

L-27-163 (S-1-48) Fragment of cylindrical mano stone -volcanic/  
rock

L-27-164 (S-1-32) Mano - limestone

L-27-165 (S-1-38) Granitoid igneous rock (carved fragment)

L-27-166 (S-5-1)? Mano limestone

L-27-176 (E-1-159) clay (tube?) , carved

L-27-47 (W-17-24  
&-39 ↓ Shale (back of mirror.

As identified at sight by Frank J. Keeley  
Samuel G. Gordon.

Piedras Negras, 1932.  
Johnson Expeditions  
Nov. 10, 1932.

2nd Memorandum list of Stone & minerals  
for identification.

- |                              |  |
|------------------------------|--|
| ✓ L-27-4 (W-6-21f)           | Fragment of celt? Serpentine                     |
| ✓ L-27-6-a (W-6-21-h)<br>-b  | Two small fragments Calcite                      |
| ✓ L-27-53 (W-17-76)          | Copal? weathered limestone                       |
| ✓ L-27-89 (W-28-7)           | Flint or chert knife chert                       |
| ✓ L-27-94 (S-1-30)           | Flint or chert knife chert                       |
| ✓ L-27-95 (S-1-31)           | Flint or chert point, spear-head? Flint          |
| ✓ L-27-97 (S-1-42)           | Flint (?) nodule (?) - hammer-stone. chert       |
| ✓ L-27-163 (S-1-48)          | Fragment of cylindrical mano stone Volcanic rock |
| ✓ L-27-164m (S-1-32)         | Ditto. Limestone                                 |
| ✓ L-27-165 (S-1-38)          | Fragment of carved stone Granitoid igneous rock. |
| ✓ L-27-166 (S-5-1)?          | Fragments of cylindrical mano stones. Limestone  |
| ✓ L-27-176 (E-1-159)         | Fragment of clay-stone? tube? clay               |
| ✓ L-27-47 (W-17-24<br>& -39) | Fragments of back of mirror- shale? Shale        |

As identified by  
Frank J. Kealey  
and Samuel G. Gordon.

all checked, OK.

Memorandum List of Identifications  
by Academy of Natural Science, Phila., 1932.

Shell

*Morun tuberculatum* (Scob.); a marine shell from the west coast of Mexico or Central America. "Panamic shells Province shells range from Panama to Gulf of California.

OK L-27-40 (the unbroken shell)

*Spondylus limbatum* Brod.

OK ✓ L-27-39  
OK ✓ L-27-44  
OK ✓ L-27-52  
OK ✓ L-27-78-a, b & c  
OK ✓ L-27-79  
OK ✓ L-27-80

*Spondylus* ~~fish~~ *princeps* Brod; marine shell from west coast of Mexico or Central America (see note under L-27-40)

OK L-27-50

*Quadrula quadrata* Simps; fresh water (Guatemalan) species.

OK ✓ L-27-49  
OK ✓ L-27-51  
OK ✓ L-27-57

*Pomacea*, fragments of immature shell, species not determinable, but fresh water, Guatemalan.

OK ✓ L-27-5

*Pomacea ghiesbreghtii* (Roeve), also called "*Ampullaria ghiesbreghtii*"; fresh water (Guatemalan) species.

OK ✓ L-27-152

*Pachycilus indiorum* (Morelet); native of Guatemala

OK ✓ L-27-40 (the broken shell)

Stone and minerals for identification.

- 1 small piece of hematite. (from mosaic mirror). Pyrite, altered on surface to limonite.
- OK ✓ L-27-22 Jade bead Jade
- OK ✓ L-27-27 Jade object Jade
- OK ✓ L-27-31 String of Jade beads Jade (Dickside - density of 3.28)
- OK ✓ L-27-34 Match-box containing three small pieces of worked jade. Jade
- OK ✓ L-27-36 String of beads (turquoise??) Feldspar variety microcline  
Amazonstone.

Memo re Turtle Shell  
at Piedras Negras.

Cat. No. L-27-186  
(field No. S-1-10)

- a subsequent note, made here, in the field catalogue says this is probably from a soft shell turtle: I can't find the original identification sheet, but this note could only be made on authority of identification at the Academy. Nothing as to whether it is from carapace or not, nor whether it was cut. Have to examine the ~~piece~~ piece for that.

It was found in association with peccary and (probably) deer bones, in probably disturbed position, close to rear wall of South Group Ball Court.

Cat. No. L-39-251  
(field No. W-2-46)

Field identification was "piece of cut bone, probably turtle. Has not been sent to Academy. Found in a drain, below floor of Palace J-2 (Room 6), which leads from the open court. This piece was very probably lost or discarded in the court, and washed into the drain in Maya times - but it might have got there long after. However, it could not have been washed in after the facade of the building collapsed and blocked the mouth of the drain.

*Mrs Wands: cut pieces for game or divination? - cp.  
Key Marco.*

Tentative List of Reptiles and Amphibians  
of the Piedras Negras region

I. Amphibians

A. Salamanders.

- (1) 1. Oedipus rufescens  
(2) 2. Oedipus salvinii (larger species - red spots on back - the one that Peggy likes).

B. Frog and Toads.

- (3) 1. Leptodactylus melanonotus  
(4) 2. Bufo valliceps (small toad)  
(5) 3. Bufo marinus (large toad - the "rueeter")  
(6) 4. Syrhopus sp. (diminutive frog)  
(7) 5. Eleutherodactylus sp. (small frog)  
(8) 6. Eleutherodactylus alfredi (small frog, no webs - with pads on toes).  
(9) 7. Hyla underwoodi (small yellow tree frog)  
(10) 8. Hyla loquax (a loud voiced medium sized tree frog).  
(11) 9. Hyla bairdini (large tree frog calls like ducks quacking).  
(12) 10. Hyla sp. nov. (large tree frog - green sides of face - blue sides of belly - purple thighs)  
(13) 11. Hyla sp. nov. (small yellow & brown tree frog - very short snout).  
(14) 12. Rana pipiens (common leopard frog).  
(15) 13. Rana palmipes (similar to above - no spots)  
[(16) 14. Rhinophrynus dorsalis (heard but not taken. This is the "rana azul" or what sounds like "gaw")]  
(17) 15. Microhyla elegans - (small toad narrow mouth).

## II - Reptiles

### A. lizards

- (18) 1. Iguana iguana rhinolopha (the iguana)
- (19) 2. Basiliscus vittatus (the "toloac corriente" a striped crested lizard).
- (20) 3. Corythophanes hernandezii - (a dull witted red "toloac")
- (21) 4. Corythophanes sp. nov. (the "piedra gente")
- (22) 5. Anolis ruthveni (all anolis lizards have dewlap)
- (23) 6. Anolis sp.
- (24) 7. Anolis sp.
- (25) 8. Anolis copei
- (26) 9. Anolis sp.
- (27) 10. Sceloporus cupreus (common rough scaled form seen about houses).
- (28) 11. Sceloporus serrifer plioporus (large rough scaled form - black ring around neck).
- (29) 12. Ameiva festiva (large brown lizard - long tailed blue belly - stripe down middle of back).
- (30) 13. Ameiva undulata (similar to above no stripe).
- (31) 14. Eumeces semicinctus (very smooth scaled lizard - young striped - adult not).
- (32) 15. Eumeces schwartzii (large very smooth scaled weak limbed).
- (33) 16. Sceloporus assatum assatum (small brown smooth scaled lizard - weak limbs).
- (34) 17. Thecadactylus rapicaudis (a Gecko - a night lizard - pads on toes - the "scorpion" of the region - this one is believed to bite shadow).
- (35) 18. Sphaerodactylus glaucus - (also a Gecko - very small lives in houses - Bill found one in branch library - common in Tenosique - Obregon - Carmen - known as "guarda casa").
- (36) 19. Coleonyx elegans (nocturnal - in forest on ground slow moving - red bands on body - holds body nearly erect on limbs).

- Reptiles (Continued)

B. Snakes - a. Completely harmless.

(37) 1. Eudryas sp (a racer).

(38) 2. Drymarchon Corais melanurus - (the indigo snake - the 8'5" snake).

(39) 3. Drymobius margaritiferus - (a green snake with a yellow spot on each scale).

(40) 4. Phrynonax argus - (a racer - black with a yellow spot in each scale).

(41) 5. Ninia diademata (a small dark snake with yellow ring around neck).

b. Mildly venomous - not dangerous -

(42) 6. Tropidodipsis fasciatus - (diminutive banded snake - red median stripe).

(43) 7. Leptodeira polytieta -

(44) 8. Ficinia sp. (snout slightly upturned).

(45) 9. Tantilla sp. (very small)

(46) 10. Coniophanes sp. (small brown species)

(47) 11. Sigynophis annulata (marked like coral snake on head & neck - remainder of body gray)

(48) 12. Imantodes cerulea - (very slender marked like nayaaca).

(49) 13. Xenodon angustirostris (short fat looks like nayaaca).

(50) 14. Snake - gen. sp.

c. Highly venomous (nayaacas).

(51) 15. Bothrops rummifera (very large nayaaca)

16. Bothrops nasuta (more pointed head snout upturned).

Bothrops atrox - the "barba amarilla" is said to occur.

## II Reptiles (continued).

### C. Turtles

- (53) 1. Kinosternon heresiianum - (small dull colored)  
(54) 2. Kinosternon leucostomum ( " " " " )  
(55) 3. Pseudemys sp. (large painted turtle).  
(demys)

### D. Crocodiles

- (56) 1. Crocodylus acutus.

July 27, 1941

Partly Revised list, Piedras Negras  
Reptiles and Amphibians

I. Amphibians

A. Salamanders

- 1 (1) *Bolitoglossa rufescens*
- 2 (2) *Bolitoglossa mexicanus*

B. Frogs and toads

- 3 (1) *Leptodactylus melanonotus*
- 4 (2) *Bufo marinus*
- 5 (3) *Bufo valliceps*
- 6 (4) *Syrhropus verruculatus*
- 7 (5) *Eleutherodactylus rhodopis*
- 8 (6) *Eleutherodactylus alfredi*
- 9 (7) *Hyla underwoodi*
- 10 (8) *Hyla loquax*
- 11 (9) *Hyla baudinii*
- 12 (10) *Hyla n. sp.*
- 13 (11) *Hyla n. sp.*
- 14 (12) *Rana pipiens*
- 15 (13) *Rana palmipes*
- 16 (14) *Microhyla elegans*
- Rhinophrynus dorsalis* heard, but not collected

II. Reptiles

A. Lizards

- 17 (1) *Iguana iguana rhinolopha*
- 18 (2) *Basiliscus vittatus*
- 19 (3) *Corythophanes hermandesii*
- 20 (4) *Corythophanes cristatus*
- 21 (5) *Anolis ruthveni*
- 22 (6) *Anolis copei*
- 23 (7) *Anolis sp.*
- 24 (8) *Anolis sp.*
- 25 (9) *Anolis sp.*
- 26 (10) *Sceloporus teapensis*
- 27 (11) *Sceloporus serrifer plioporus*
- 28 (12) *Ameiva festiva*
- 29 (13) *Ameiva undulata hartwegi*
- 30 (14) *Eumeces sumichrasti*
- 31 (15) *Eumeces schwartzei*
- 32 (16) *Lygosoma cherriei cherriei*
- 33 (17) *Thecadactylus rapicaudus*
- 34 (18) *Sphaerodactylus glaucus glaucus*
- 35 (19) *Coleonyx elegans*
- 36 (20) *Lepidophyma flavomaculatum flavomaculatum*

B. Snakes

- a. Completely harmless
  - 37 (1) *Dendrophidion vinitor*
  - 38 (2) *Drymarchon corais melanurus*

39. *Drymobius margaritiferus margaritiferus*
40. *Pseustes poecilonotus argus*
41. *Ninia diademata*

b. Mildly venomous

42. *Sibon dimidiata*
43. *Leptodeira annulata polysticta*
44. *Ficimia publia*
45. *Coniophanes fissidens fissidens*
46. *Tantillita lintoni*
47. *Scaphiodontophis carpocinctus*
48. *Imantodes cenchoa leucomelas*
49. *Xenodon mexicanus*

c. Highly venomous

51. *Bothrops nummifer nummifer*
52. *Bothrops nasuta*

C. Turtles

53. *Kinosternon acutum*
54. *Kinosternon leucostomum*
55. *Pseudemys* sp.

D. Crocodiles

56. *Crocodylus moreletii*

Up until the time you send your work to press and wish to be done with the list, I will continue to send you any corrections necessary. If it happens that I do not get around to making any further additions before the time you are ready to send in the list with your work, the present list will do, of course.

*The spelling of the scientific names has been carefully checked and is OK*

Tentative List of Reptiles and Amphibians  
of the  
Piedras Negras Region

See later list,  
July 27, 1941.

I. AMPHIBIANS

A. Salamanders

- 1 (1) Oedipus rufescens (small species)
- 2 (2) Oedipus salvinii (larger species, the one Peggy likes)

B. Frogs and toads

- 3 (1) Leptodactylus melanonotus (small ground frog, spines on thumb of male)
- 4 (2) Bufo marinus (large toad, the riveter heard from river)
- 5 (3) Bufo valliceps (smaller toad, line of warts on side)
- 6 (4) Syrhopus leprosus (diminutive ground frog, cricket-like voice)
- 7 (5) Eleutherodactylus rhodopus (small brown ground frog, extremely abundant on paths at night, cricket-like voice)
- 8 (6) Eleutherodactylus alfredi (small, light-colored ground frog, no webs between toes, pads on tips of toes)
- 9 (7) Hyla underwoodi (small tree frog, yellow, dark cross on back)
- 10 (8) Hyla loquax (a loud-voiced, medium-sized tree frog)
- 11 (9) Hyla baudinii (large tree frog, calls like ducks)
- 12 (10) Hyla new species (large tree frog, sides of head green, thighs purple)
- 13 (11) Hyla new species (small tree frog, very short snout, yellow, cross on back)
- 14 (12) Rana pipiens (common leopard frog)
- 15 (13) Rana palmipes (similar to above, no spots)
- 16 (14) Microhyla elegans (small 'toad', narrow-mouthed)

Rhinophrynus dorsalis (heard, but not collected. This is the "rana azul" or what sounds like "gaw". A very fat bodied, very tiny headed, short-limbed species, call sounds like a person vomiting)

II. REPTILES

A. Lizards

- 17 (1) Iguana iguana rhinolopha (the iguana)
- 18 (2) Basiliscus vittatus (the "tolec corriente"; a striped, crested lizard)
- 19 (3) Corythophanes hernandezii (a dull-witted, red "tolec")
- 20 (4) Corythophanes new species (the "pierda gente" or "pierda camino", a species believed, when seen, to make one lose his way in the jungle)
- 21 (5) Anolis ruthveni (all Anolis are lizards with dewlaps, a sort of throat-fan expanded at certain times to scare other males - females have only very tiny, non-extensible fans. Some species common on the houses, run on the walls)
- 22 (6) Anolis copei (a large, pure green species, perhaps a foot long)
- 23 (7) Anolis species unidentified
- 24 (8) Anolis species unidentified
- 25 (9) Anolis species unidentified

- 26 (10) Sceloporus cupreus (common, small, chocolate-colored, rough-scaled form seen about houses)
- 27 (11) Sceloporus serrifer plioporus (larger, black ring on neck, seen on largetrees about ruins)
- 28 (12) Ameiva festiva (long-tailed, blue-bellied, stripe down middle of back)
- 29 (13) Ameiva undulata subspecies (long-tailed, blue-bellied, no stripe)
- 30 (14) Eumeces sumichrasti (young lined, adults not, large males reddish-headed; very smooth-scaled, weak-limbed, active, on ground or under bark on fallen trees)
- 31 (15) Eumeces schwartzei (large, smooth-scaled, weak-limbed, checkered tail)
- 32 (16) Leiolopisma sp. (small, brown, smooth-scaled, weak-limbed, ground species, very quick in movement)
- 33 (17) Thecadactylus rapicaudus (gecko; pads on toes; night lizard; scorpion; bites shadow and you die)
- 34 (18) Sphaerodactylus glaucus (gecko; very diminutive; lives in houses; Bill found one in branch library; common in Tenosique etc., known as "guardacasa")
- 35 (19) Coleonyx elegans (nocturnal; in forest on ground; slow-moving; nearly transparent; bands of red on body; holds body nearly erect on limbs)
- 36 (20) Lepidophyma smithi (a rough-scaled, secretive species usually under bark; brown; has young alive)

## B. Snakes

- a. Completely harmless (i.e., no venom)
- 37 (1) Eudryas species (a racer)
- 38 (2) Drymarchon corais melanurus (the 8-ft. snake)
- 39.(3) Drymobius margaritiferus (a racer, greenish with a yellow spot on each scale)
- 40 (4) Phrynonax argus (a large racer, black with yellow spots)
- 41 (5) Ninia diademata (a small, black, yellow neck ring)
- b. Mildly venomous (not dangerous to humans)
- 42 (6) Tropidodipsas fasciatus (diminutive banded snake, red median stripe)
- 43 (7) Leptodeira polysticta (slender tan species, small blotches on back)
- 44 (8) Ficimia species (snout slightly turned up)
- 45 (9) Coniophanes species (small brown species)
- 46 (10) Tantilla sp. (very tiny, light, ring on neck)
- 47 (11) Sibynomorphus annulatus subspecies (coral-snake-like on head, rest of body and tail gray)
- 48 (12) Imantodes cenchoa (very slender, marked like nauyaca)
- 49 (13) Xenodon angustirostris (short, fat, looks like nauyaca)

c. Highly venomous (nauyacac)

51 (15) Bothrops nummifera (like the very large nauyaca you found)

52 (16) Bothrops nasuta (more pointed head, snout upturned)

Bothrops atrox (reputed to occur, undoubtedly does.  
Is the "barba amarilla")

C. Turtles

53 (1) Kinosternon berendtianum (small, dull-colored, bad odor)

54 (2) Kinosternon leucostomum (same, white lips)

55 (3) Pseudemys species (larger, painted turtle)

D. Crocodiles

56 (1) Crocodylus acutus

1936

	No. of Days with Rain	Inches of Rain (parts of inches desregard)	1937	
			A	B
Apr. 1-15	5	2.29	5	5.09
16-30	4	2.39	4	1.84
May 1-15	7	5.71	2	0.96
May 16-31	5	3.04	10*	10.20*
June 1-15	9*	14.55*	10	7.48
June 15-30	10	8.95	15	13.50

↳ To Nogues, Mar, 1948

Record of rain fall at the ruins of Piedras Negras, Peten, Guatemala, on the right bank of the Usumacinta river.

The guage used was a 5-lb "Klim" tin from which the beaded edge was removed to give a sharp edge at the top, and in which a tin-foil funnel was loosely fitted to cut down evapoartion. Water contents were read every morning at 7 A.M. by puring in ordinary measuring beaker graduated only to the oz. so that fractions of an ounce had to be estimated. The surface of the water and not the raised edge in contact with the glass was noted, and readings are probably accurate to within two or three tenths of an ounce. The diameter of the can was 15.45 cms. The measuring beakers were ordinary glass ones purchased for photographic work.

The guage was raised about 1 m. above the ground, about five meters from the nearest hut. It was of necessity placed in a small narrow valley with wooded hills on all sides. It is probable that the air movements in this valley are controlled by the hills, which are steep, to a considerable extent.

1935

May	1	no rain		
	2	no rain		
	3	hard shower at 5.45 P.M., not measured.		
	4	no rain		
	5	<del>rain-during-night, not measured</del> no rain		
	6	rain during night, not measured		
	7	no rain		
	8	"		
	9	"		
	10	shower, 2.30 to 3.00 P.M.		
	11	rained "quite hard" during night - not measured.		
	12	to 20th - no rain		
	21	rain at 7.30 A.M. - 18.5 ounces		
	22	" 7.30 A.M. - 10.25 "		
	23	no rain		
	24	no rain		
	25	rain at 7.00 A.M. - 39.3 "		
	26	" 7.30 A.M. - 16.75 "		
	27	" 7.00 A.M. - 8.75 "		
	28	to 31, no rain.		
June	1	no rain		
	2	rain at 7.30 A.M. - 3.9 "		
	3	rain at 7.30 A.M. - 2.2 "		
	4.	" 7.00 A.M. - 8.3 "		
	5	no rain except a mere sprinkle night before.		
	6	rain at 7.00 A.M. <del>15.75-ounces</del> 3.00 ounces/		
	7	" 7.00 A.M. 15.75 ounces		
	8	Sprinkle night before, five drops of water in guage.		
	9	rain at 7.30 A.M. 4.25 ounces		
	10	rain at 7.00 A.M. 31.50 "		

1935.

June 11	rain at	7.30 A.M.	-	8.75	ounces
12	"	7.00 A.M.	-	14.50	"
13	"	7.00 A.M.	-	11.9	"
14	"	7.00 A.M.	-	.5	"
15	no rain				
16	no rain				
17	rain at	7.00 A.M.		3.0	"
18	no rain	<del>7.00 A.M.</del>			
19	rain at	7.00 A.M.		7.9	"
20	"	7.00 A.M.		12.25	"

Note: Where times are stated they indicate the time of reading, not the time of the rain.

Practically all the rain noted above, except the last two or three days, occurred in the late afternoon, evening, night or early mornings. Daily work was not interfered with by rain from March 6 to June 18 or 19.

No record was kept from the time of arrival, March 6, to May 1; during this time there was no rain to speak of except April 13 and perhaps once or twice between then and May 1. Local reports indicated an unusually dry season before our arrival March 6, with very little rain since December; we found the ground very dry on arrival, in comparison with former years. Local milperos reported the corn very much behind time in its development in May, but expected new corn "in July or August". Corn was very hard to buy by the middle of April, from Tenosique to six leagues above Yaxchilan, perhaps further, but apparently was not particularly scarce at Emiliano Zapata (~~Monte~~ Monte Cristo) one days ride northwest of Tenosique. The price at Tenosique during the early part of May was 20 centavos per kilo of shelled corn. The poorer people were reported to be living on substitutes there, especially mangoes and bananas.

Gente from Zapata said the Tenosequenos were short because they were too lazy to plant milpas. A appreciable portion of the Tenosique population has come to count on wages in lumber camps; but since lumbering operations were much more common this season than any other during the past five years Tenosique workers should have been in better than usual positions to import needed corn.

Rainfall  
1936

*Inches*

Figures by Dr. Kempton

April	3	.900
	4	.217
	8	.124
	9	.373
	13	.683
	18	1.740
	20	.528
	21	.124
Total		4.690

2.297

2.392 4.689 79

2

2

May	3	.0155
	4	.606
	5	1.817
	11	1.755
	13	.217
	14	.932
	15	.232
	18	.668
	20	.932
	25	.295
	29	.342
	31	.808
Total		8.620

5.714

3.045 8.759

5

3

June	6	.528
	7	.109
	9	.621
	10	3.448
	11	1.860
	11	4.194
	12	2.361
	13	1.103
	14	.124
	16	.373
	18	1.988
	19	1.087
	20	.606
	22	2.842
	23	.264
	24	.047
	25	.186
	26	1.149
	29	.404
Total		23.299

13.090  
2.624  
13.714

14.558

14

8.950

8

July 1 .714  
Total for entire period 37.320

*NB 29 wide  
 from 1.607 to 1.606  
 inches for Kambst m.*

Piedras Negras,  
 Peten, Guatemala

*Same gauge as 1935  
 dia. 1.5.45  
 Water measured in  
 grad. glass, graduated  
 to 1 ounce only.*

RAIN RECORD - 1936

DATE	TIME	AMOUNT	REMARKS
April 1 and 2		No rain	
3	8:30 A.M	14½ ounces	
4	8 A.M	3½ "	
5, 6 and 7		No rain	
8	7:30 A.M	2 ounces	
9	8 A.M	6 "	
10, 11 and 12		No rain	
13	7:30 A.M	11 ounces	Started raining at 6:45 P.M April 12th- continued through night (?).
14, 15, 16 and 17		No Rain	
18	7:15 A.M	28 ounces	Started raining about 2:45 P.M April 17th- shower lasted about 1 hour. As to rain in night (?)
19		Sprinkle	
20	10:30 A.M	8½ ounces	Rained during night of April 19th and in early A.M of 20th
21	8 A.M	2 ounces	Rained during night of April 20th
22, 23, 24, 25, 26		No rain	
27, 28, 29, 30		No rain	
<u>MAY</u> 1 and 2		No rain	
3	10:45 A.M	¼ ounce	Rained during night of May 2nd or early morning of May 3rd- drizzled some about 9:30 May 3rd

DATE	TIME	AMOUNT	REMARKS
4	6:15 A.M	9 $\frac{1}{2}$ ounces	Started to rain about 9 P.M. on May 3rd. Rained during night and A.M. of May 4th.
5	7:30 A.M	29 $\frac{1}{2}$ ounces	Started to rain about 2 A.M on May 5th.
6,7,8,9,10		No rain	
11	7 A.M	28 $\frac{1}{2}$ ounces	Rained during night of May 10th (started about 9 or 10 P.M) and probably during early A.M on May 11th.
12		No rain	
13	6 A.M	3 $\frac{1}{2}$ ounces	Rained during night of May 12 or early A.M of May 13th
14	8:30A.M	15 ounces	Rained during night of May 13 and about 3 A.M on May 14th
15	7 A.M	3 $\frac{1}{2}$ ounces	Rained some about 5 P.M on May 14th and about 9 P.M on May 14th. Rain in early A.M on May 15 ?
16 and 17		No rain	
18	7 A.M	10 $\frac{1}{2}$ ounces	Rained about 10:45 P.M night of May 17, but just a light shower. Must have rained in early A.M. of May 18th
19		No rain	
20	8 A. M.	15 ounces	Rained about 8:30 P.M of May 19th and probably in the early A. M. of May 20th.
21,22,23,24		No Rain	
May	7 A.M	4 $\frac{5}{8}$ ounces	Rained about 11:15 P.M on May 24th.
26, 27,28		No Rain	
29	7 A.M	5 $\frac{1}{2}$ ounces	Rained at 5 A.M May 29th - abt about $\frac{1}{2}$ hour
30		No Rain	
31	9:30 A.M	13 ounces	Showers about 7:30 P.M on May 30th. Rained about 6 A.M on May 31st.

(over)

DATE	TIME	AMOUNT	REMARKS
JUNE 1,2,3,4,5		No Rain	
6	6:30 A.M	8½ ounces	Rained about 4:40 P.M on June 5th until 6 P.M. Hard showers. As to rain during night and early A.M. of June 6th ?
7	8 A.M	1½ ounces	Rained during night of June 6th
8		No Rain	
9	8:30 A.M	10 ounces	About 4:15 P.M on June 8th -hard and long rain
10	8:30	55½ ounces	On June 9th rained about 12 A.M. (hard showers) Rained again at 7:30 P.M (JUNE 9th) and continued until 10:30 P.M or later. Rained about 6:30 A.M on June 10th
11	7 A.M	30 ounces	Rained off and on during day of June 10th and morning of June 11th. Slow and steady rain when amount was taken
<u>11</u>	<u>7:30 P.M</u>	67½ ounces	Rained all during day of June 11th. At 5:30 P.M hard rain (almost a cloudburst)
12	7 A.M	38 ounces	Rain (probably) during night of June 11th and early A.M. of June 12th. Raining when amount was taken
13	7 A.M	17½ ounces	Rained off and on during day of June 12th and early A.M. of June 13 th.
14	7:30 A.M	2 ounces	Rained a little on June 13th
15		No Rain	
16	7:05	6 ounces	Rained on June 15th about 2:30 P.M and again about 5 P.M.
17		No Rain	
18	7:30 A.M	32 ounces	Rained on June 17th about 11:30 A.M. Rained quite hard about 7 P.M and again at 11 P.M. As to rain in early A.M of June 18 ??
19	7:15 A.M	17½ ounces	Rained on June 18th about 5 P.M, again about 6:45 P.M and continued until about 9:30 P.M. As to rain later in the night and early A.M of June 19th ??

DATE	TIME	AMOUNT	REMARKS
JUNE 20	6:45 A.M	9 $\frac{3}{4}$ ounces	Rained about 7 P.M on June 19th
21		No rain	
22	9 A.M	45 $\frac{5}{8}$ ounces	Rained about 6:30 P.M on June 21 and continued until 11:30 P.M. As to rain in early A. M of June 22 ??
23	7:15 A.M	4 $\frac{1}{4}$ ounces	Rained about 8:30 P.M on June 22nd.
24	7:15 A. M	$\frac{5}{8}$ ounce	Rained about 9:30 P.M on June 23rd.
25	7:45 A.M	3 ounces	Rained about 3 P.M and again at 7:30 P.M on June 24th
26	7 A.M	18 $\frac{1}{2}$ ounces	Started to rain about 9:45 P.M on June 25th - as to rain later in night and early A.M of June 26th ??
27, 28		No Rain	
29	8 A.M	6 $\frac{1}{2}$ ounces	Rained about 10:30 P.M on June 28th.
30		No Rain	
JULY 1	8 A.M	11 $\frac{1}{2}$ ounces	Rained about 5 P.M on June 30th

Site & position same as 1936  
(15.45 cms.)

1937

Rain Record - Piedras Negras, Peten, Guatemala

<u>APRIL</u>		<u>AMOUNT</u>
1	No Rain	
2	" "	
3	" "	
4	" "	
5	" "	
6	" "	
7	Rained on April 6th about 7:30 P.M	21 ounces
8	No Rain	
9	" "	
10	(Rained intermittently on 9th	4 ounces
11	No Rain	
12	(Rained on 11th)	3 $\frac{1}{2}$ "
13	(Rained on 12th)	5 "
14	(No Rain)	
15	(Rained hard during day and night of 14th	48 $\frac{1}{2}$ "
16	(No Rain)	
17	(No Rain)	
18	(Rained late on night of 17th or early A.M of 18th)	4 "
19	(Rained between 11 P.M and 1 A. M)	5 "
20	(Rained between 5 P.M and 7 P.M of 19th)	3 $\frac{1}{2}$ "
21	(Rained between 9:30 and 10 P.M of 20th)	(not enough to measure)
22	No Rain	
23	" "	
24	" "	
25	(Rained about 2 A.M	17 $\frac{1}{2}$ ounces
26	(Rained late P.M of 25th or early A.M of 26th)	Ran can blew over)
27	No Rain	
28	" "	
29	" "	
30	" "	
<u>MAY</u>		
1	No Rain	
2	" "	
3	(Rained about 7:45 P.M of 2nd)	12 $\frac{3}{4}$ ounces
4	No Rain	
5	" "	
6	(Rained about 2:30 P.M of 5th	
7	" "	
8	" "	
9	" "	
10	" "	
11	" "	
12	" "	
13	" "	
14	" "	
15	Rained in early A. M	
16	No Rain	
17	" "	

(over)

JUNE

26	Rained about 10 P.M of 25th	12 ounces
27	Rained about 3:30 P.M and 9:30 P.M of 26th	12 $\frac{1}{2}$ "
28	Rained about 12:30, probably during night of 27th	12 "
29	Started to rain about 10 P.M of 28th - still raining when amount measured at 7 A.M of 29th	52 $\frac{1}{2}$ "
30	Probably rained in early A. M of 30th - raining when amount measured at 7 A.M	1 $\frac{1}{2}$ "

JULY

1	Rained in the morning of June 30th	$\frac{3}{4}$ ounce
---	------------------------------------	---------------------

MAYAMOUNT

18	Rained about 7:30 P.M of 17th and early A.M of 18th	28 ounces
19	Rained intermittently on 18th, early A. M of 19th	46 $\frac{1}{2}$ "
20	Started to rain about 7:30 P.M on 19th - probably continued to A. M. of 20th	45 "
21	Rained some about 8 P.M. on 20th	2 $\frac{3}{4}$ "
22	No Rain	
23	No Rain	
24	Rained in early A.M of 24th	1 ounce
25	Rained about 9 P.M of 24th, probably contined to early A. M of 25th	14 ounces
26	Rained some in evening of 26th	(not enough to measure
27	Rained some about 5 P.M of 26th	Not enough to measure
28	Rained about 6:30 P.M of 27th and early A.M of 28th	7 $\frac{1}{2}$ ounces
29	Rained about 7:30 P.M of 28th	4 $\frac{1}{2}$ "
30	Rained about 10 P.M of 29th	2 "
31	Rained about 5 P.M and again at 8:30 P.M of 30th	15 "

JUNE

1	Rained intermittently on May 31st (light showers)	3 $\frac{1}{2}$ "
2	Rained about 8 P.M of June 1st. Probably early A.M of June 2nd	10 $\frac{1}{2}$ "
3	Rained about 4:30 P.M and 7 P.M of June 2nd, probably continued into early A.M of 3rd.	28 $\frac{1}{2}$ "
4	Rained about 12 P.M of 3rd	10 $\frac{1}{2}$ "
5	Rained a little about 6:30 P.M of 4th	not enough in can to measure.
6	Rained about 7:30 P.M of 5th	8 ounces
7	Rained about 7:15 P.M of 6th	5 $\frac{1}{2}$ "
8	No rain	
9	Rained a little about 3 P.M of 8th	Not enough to measure
10	Rained about 7P.M of 9th	1 ounce
11	Rained a little in the afternoon of 10th	--
12	Rained about 10 A.M and in P.M of 11th	6 ounces
13	Rained in the late afternoon of 12th	--
14	Rained hard about 5 P.M of 13th	10 ounces
15	Rained hard about 7:30 P.M of 14th	16 $\frac{3}{4}$ "
16	Rained about 4 P.M of 15th	3 $\frac{1}{2}$ "
17	" about 3:30 P.M of 16th, early A.M of 17th	14 $\frac{1}{2}$ "
18	" from 8 to 8:30 A.M and from 7:30 P.M thru night of 17th	16 $\frac{1}{2}$ "
19	Rained about 5 P.M of 18th	2 "
20	Started raining about 7 P.M of 19th, probably continued during night of 19th and early A.M of 20th Raining at 8 A.M of 20th when about was measured	23 $\frac{3}{4}$ "
21	Rained A.M of 20th	1 ounce
22	Rained a little about 9:15 of 21st	$\frac{1}{2}$ "
23	" about 8 P.M of 22nd-probably rained hard in early A.M of 23rd.	21 ounces
24	Rained about 10 P.M of 23rd, probably early A.M of 24th.	11 $\frac{1}{2}$ "
25	Rained about 9:30 P.M of 24th	17 "

Rainfall

Piedras Negras, Peten, Guatemala

From April 1 to July 1, incl., 1937.

Converted from ounces to inches by factor .06210648 (By Kempton)

April	7	1.304		June	1	.202	
	10	.248			2	.668	
	12	.217			3	3.010	
	13	.311			4	.665	
	15	3.012	5.092 ✓		6	.497	
	18	.248			7	.342	
	19	.311			10	.062	
	20	.217			12	.373	
	25	1.070	1.846 ✓		14	.621	
Total		6.938			15	1.040	7.480 ✓
					16	.217	343
May	3	.791			17	.900	
	15	.171	0.962 ✓		18	1.025	
	18	1.739	7.000 ✓		19	.124	
	19	2.888			20	1.475	
	20	2.671			21	.062	
	21	.171			22	.031	
	24	.062			23	1.304	
	25	.869			24	.699	
	28	.466			25	1.056	
	29	.279			26	.745	
	30	.124			27	.776	
	31	.932	10.202 ✓		28	1.739	
Total		11.163			29	3.261	
					30	.093	13.507 ✓
				Total		20.987	576
					July 1	.047	
				Total		.047	
				Total for period		39.135	
				Total for 1936		37.320	

11.163  
7.900  
2.63

← inches in June?

1937  
Rain Record

<u>April</u>		<u>Amount</u>
1	No Rain	
2	" "	
3	" "	
4	" "	
5	" "	
6	" "	
7	(Rained on April 6 about 7:30 P.M.)	21 ounces
8	No Rain	
9	" "	
10	(Rained intermittently on 9th)	4 ounces
11	No Rain	
12	(Rained on 11th)	3 1/2 ounces
13	(Rained on 12th)	5 ounces
14	No Rain	
15	(Rained hard during day and night of 14th)	48 1/2 ounces
16	No Rain	
17	" "	
18	(Rained late on night of 17th or Early A.M. of 18th)	4 ounces
19	(Rained between 11 P.M. and 1 A.M.)	5 ounces
20	(Rained " 5 P.M. " 7 P.M. of 19th)	3 1/2 ounces
21	(Rained " 9:30 " 10 P.M. of 20th)	not enough to measure
22	No Rain	
23	" "	
24	" "	
25	(Rained about 2 A.M.)	17 1/4 ounces
26	(Rained late P.M. of 25th or Early A.M. of 26th)	Can blow over
27	No Rain	
28	" "	
29	" "	
30	" "	
<u>May</u>		
1	" "	
2	" "	
3	(Rained about 7:45 P.M. of 2nd)	12 3/4 ounces
4	No Rain	
5	" "	
6	(Rained about 2:30 P.M. of 5th)	

(Over)

## Rain Record

MayAmount

7	No Rain	
8	" "	
9	" "	
10	" "	
11	" "	
12	" "	
13	" "	
14	" "	
15	(Rained in early A.M.)	2 <sup>3</sup> / <sub>4</sub> ounces
16	No Rain	
17	" "	
18	(Rained about 7:30 P.M. of 17th and early A.M. of 18th)	28 ounces
19	(Rained intermittently on 18th and early A.M. of 19th)	46 <sup>1</sup> / <sub>2</sub> ounces
20	(Started to rain about 7:30 P.M. on 19th - probably continued to A.M. of 20th)	43 ounces
21	(Rained some about 8 P.M. on 20th)	2 <sup>3</sup> / <sub>4</sub> ounces
22	No Rain	
23	No Rain	
24	(Rained in early A.M. of 24th)	1 ounce
25	(Rained about 9 P.M. of 24th - probably continued to early A.M. of 25th)	14 ounces
26	(Rained some in evening of 25th)	not enough to measure
27	(Rained some about 5 P.M. of 26th)	No rain in can
28	(Rained about 6:30 P.M. of 27th and early A.M. of 28th)	7 <sup>1</sup> / <sub>2</sub> ounces
29	(Rained about 7:30 P.M. of 28th)	4 <sup>1</sup> / <sub>4</sub> ounces
30	(Rained about 10 P.M. of 29th)	2 ounces
31	(Rained about 5 P.M. and again at 8:30 P.M. of 30th)	15 ounces

June

1	(Rained intermittently on May 31st (light showers)	3 <sup>1</sup> / <sub>4</sub> ounces
2	(Rained about 8 P.M. of June 1st - probably early A.M. of June 2nd)	10 <sup>3</sup> / <sub>4</sub> ounces
3	(Rained about 4:30 P.M. and 7 P.M. of 2nd continued probably into early A.M. of 3rd)	48 <sup>1</sup> / <sub>2</sub> ounces
4	(Rained about 12 P.M. night of 3rd)	10 <sup>1</sup> / <sub>4</sub> ounces
5	(Rained a little about 6:30 P.M. of 4th)	not enough in can to measure
6	(Rained about 7:30 P.M. of 5th)	8 ounces
7	(Rained about 7:15 P.M. of 6th)	5 <sup>1</sup> / <sub>2</sub> ounces
8	No Rain	
9	Rained a little about 3 P.M. of 8th	no water in can.
10	Rained about 7 P.M. of 9th	1 ounce
11	Rained a little in the afternoon of 10th	no water in can
12	Rained in the A.M. (10:30 or so) in P.M. intermittently of 11th	6 ounces

Rain Record

June		Amount
13	Rained late in the afternoon of 12th - not a hard rain	no water in can
14	Rained hard about 5 P.M. of 15th - probably rained during night	10 ounces
15	Rained hard about 7:30 P.M. of 14th - probably rained during night	16 <sup>3</sup> / <sub>4</sub> ounces
16	Rained about 4 P.M. of 15th	3 <sup>1</sup> / <sub>2</sub> ounces
17	Rained hard about 3:30 P.M. of 16th - rained early A.M. of 17th	14 <sup>1</sup> / <sub>2</sub> ounces
18	Rained about 8 to 8:30 A.M. and from 7:30 P.M. thru night of 17th	16 <sup>1</sup> / <sub>2</sub> ounces
19	Rained a little about 5 P.M. of 18th	2 ounces
20	Started raining about 7 P.M. of 19th - probably continued during night of 19th and early A.M. of 20th - Raining at 8 A.M. of 20th when amount was taken	23 <sup>3</sup> / <sub>4</sub> ounces
21	Rained a little about 8:30 A.M. of 20th	1 ounce
22	Rained a little about 9:15 P.M. of 21st	<sup>1</sup> / <sub>2</sub> ounce
23	Rained about 8 P.M. of 22. Probably rained hard in early <sup>of 23rd</sup> A.M.	21 ounces
24	Rained about 10 P.M. of 23. Probably early A.M. of 24th	11 <sup>1</sup> / <sub>4</sub> ounces
25	Rained about 9:30 P.M. of 24th. hard rain	17 ounces
26	Rained about 10: P.M. of 25th	12 ounces
27	Rained (light shower) about 3:30 P.M. again about 9:30 P.M. of 26th	12 <sup>1</sup> / <sub>2</sub> ounces
28	Rained (light shower) about 12:30 A.M. - probably again in night of 27th	12 ounces
29	Started to rain about 10 P.M. of 28th - still raining when measured at 7 A.M. of 29th	52 <sup>1</sup> / <sub>2</sub> ounces
30	Probably rained in early A.M. of 30th - raining when measured at 7 A.M.	1 <sup>1</sup> / <sub>2</sub> ounces
<b>July</b>		
1	Rained in the morning of June 30th	<sup>3</sup> / <sub>4</sub> ounce

# Reprint Mailing List, Oct 1936

1	Bolles	3
2	Butler	3
3	Guthe	3
4	Kidder	3
5	Lothrop	3
6	Noguera	3
7	Johnson, E. R.	3
8	" E. F. Fern.	3
9	Marquina	3
10	Pollock	3
11	Recinos	3
12	Ricketson	3
13	Roys, G.	3
14	Ruppert	3
15	Smith AL	3
16	Spinden	3
17	Stromskic	3
18	Thompson	3
19	Tozzer	3
20	Vaillant	3
21	Villacorta J. A.	3
21	" Carlos	3

Delivered personally

22	Madiera
23	Proskourionoff.
24	Cresson
25	Mason
26	L. S. Jr.
27	Paulson

Memorandum re persons who should receive  
Piedras Negras Preliminary Reports.

Carnegie Inst.:

Dr. Sylvanus G. Morley  
John Bolles  
Karl Ruppert  
Harry H.D. Pollack  
Oliver Ricketson  
Ledyard Smith  
Dr. A. V. Kidder

Brooklyn Museum:

Herbert J. Spinden

Univ. Michigan:

Carl Guthe

Johns Hopkins:

William Gates

American Museum:

George Vaillant

Peabody Museum:

Dr. Alfred M. Tozzer  
\*Peabody Museum Library

Total on this preliminary list: 27

Tulane:

Frans Blom  
Beyer

\*Tulane Library

Field Museum:

J. Eric Thompson

British Museum:

Thomas A. ~~XXXX~~ Joyce  
Thomas Gann

Misc:

Lawrence Roys  
Ralph Roys  
Mason  
Satterthwaite  
Oliver LaFarge  
Museum Library  
Mexican Gov't  
Guatemalan Gov't (Check for number of  
copies).

N.B. All names should be checked for spelling & initials

Drs. Morley, Kidder, Tozzer should be queried for additional  
names names.  
names.  
\*Charge?

April, 1935.

Names to be added to Piedras Negras Preliminary Paper  
Mailing List, if not now on it.

Alfredo Barrera Vasquez - care Department of Middle American  
Research, The Tulane University, New Orleans, La.

Edwin Shook - care Carnegie Institution of Washington,  
Division of Historical Research,  
Tower Bldg., Washington, D.C.

Oliver Ricketson - " "

Mary Butler - University Museum.

Francis M. Cresson - " "

For P.N. Paper No. 3 only

Miss Tatiana Proskouriakoff - University Museum (who helped to write it)

Mr. Witte " " (who made most of the  
plates and wants  
one example of his  
work.)

D. Sutherland Davidson - Anthropology Department, (Special request,  
Univ. of Penna. which I should  
like to assent to).

Mailing List - Piedras Negras Papers.

Dr. Sylvanus G. Morley - until Mar. 1, 1933, Chichen Itza Project,  
Carnegie Institution of  
Washington,  
Dzitas, Yucatan,  
Mexico.

$\frac{1}{2}$  thereafter, Division of Historical Research,  
~~Tenaxx Building,~~  
Carnegie Institution of Washi.,  
Washington, D. C.

John S. Bolles - Feb. to June, Dzitas, same as Morley.  
- thereafter, Washington, same as Morley.

Karl Ruppert - same as Bolles.

Harry H. D. Pollock - c/o Peabody Museum, Cambridge, Mass.

G.  
Oliver/Ricketson - Washington, same as Morley.

A. Ledyard Smith

Dr. A. V. Kidder, Andover, Mass. (Phillips Academy)

Dr. George C. Vailliant American Museum of Natural History,  
New York City.

~~Kxx~~ Frans Blom, Department of Middle American Research,  
The Tulane University of La., New Orleans, La.

Beyer, same as Blom.

J. Eric Thompson, Field Museum of Natural History, Chicago, Ill.

Thmoas A. Joyce, British Museum, London, England.

Thomas Gann,

Herbert J. Spinden, ~~Brooklyn~~ Museum of the Brooklyn Institute of  
Arts and Sciences, Brooklyn, N.Y.

Dr. Carl E. Guthe,  
University of Michigan, Ann Arbor, Mich.

William Gates

Lawrence Roys, Western Structural Co., Moline, Ill.

Ralph Roys

Mary Butler, Univ. Museum, Philadelphia.

2 J. Alden Mason