

SPAIN

1975

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1975

*SD Busack +
Jane S. Peter*

PARTIAL COLLECTION TO
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the gift of
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May 6, 1976
DATE


DIRECTOR

CRAIG C. BLACK



Arrived in Madrid 1 August at 9 am. No customs problems with the rifle or ammunition. Drove to Burgos, stayed overnight, drove to Santander. Weather warm with some rain.

SPAIN: PROV. SANTANDER; SANTILLANA DEL MAR.

2 AUG 1975

Arrived around 6 pm to be met by heavy rains and cool temperatures. About 10 pm, Jones and I went collecting and took 7 Bufo bufo (CMFS 23508-514) A.O.R. (except 508-9 which were D.O.R.). The heavy rain of about 30 minutes did not remain on the road very long as the highway was fairly dry.

4 AUG 1975

SPAIN: PROV. LEON; OSEJA DE SAYAMBRE (ON C637 S. OF CANGAS DE ONÍS)

Saw the caves at Allomina yesterday during (between) heavy rains. Since the window on the car had broken, we decided to wait and have it fixed in Santander this am. Then we proceeded straight to the Picos de Europa and are staying in a Pension. During the trip here, I caught 2 Tacuta (CMFS 23515-23516) which have weights associated with them. The Picos of Europa are beautiful. Surveyed a stream on road to Soto de Sajambre (1 km S. of town) for 1 hr from 2200 to 2300 and saw nothing in stream or around stream bed. Could be altitude or temperature? Probably neither as the stream was flowing fairly rapidly and was cold but not freezing. This stream was also surveyed during the daylight hours with no luck.

5 AUG 1975

SPAIN: PROV. DE LEON; OSEJA DE SAJAMBRE, VIC. N ON 637.

Arose thi am and went collecting with PETER HOPKINS at a location about 2 km N. of OSEJA DE SAJAMBRE. We started about 1030 HRS AT 22°C T_a in area of slate outcroppings we took a series of L. muralis (CMFS 23517 - 23531):

TIME	T_b	T_a	WHAT DOING	N ₂	WT	SEX
1044	36°C	—	sunning	23517	6	♂
1147	36.4	33	—	23518	3.3	♂
1156	35	—	—	23519	3.4	♂
1157	33.8	—	in shade	23520	2.5 (BT)	♂
1100	—	—	juv seen	23521	2.0 (BT)	♀
1103	33.8	—	in shade	23522	1.9	♀
1108	33.5	—	foraging in sun	23523	4.8	♂
1111	34.8	—	foraging in shade sun	23524	2.6	♀
1137	38.4	—	foraging in sun	23525	1.8 (BT)	♀
1139	35.0	—	foraging in sun	23526	2.1	♀
—	35.2	—	open sun	23527	5.0	♂
—	30.5	—	in shade	23528	3.6	♀
1146	33.5	—	in sun	23529	2.6 (BT)	♀
1150	38.5	—	open sun	^{PHOTO} 23530	4.6	♂
1200	33.8	—	in shade	^{PHOTO} 23531	3.6	♀

N = 14 $\bar{x} = 34.87^\circ\text{C}$ N_♀ = 5 $\bar{x} = 2.76\text{ g}$ N_♂ = 6 $\bar{x} = 4.52\text{ g}$

Left Peter about 1300 and drove back to Cargas de Onís and over to COVADONGA. Then up to LAGO DE LA ERCINA arriving about 1500. From 1500 - 1700 we surveyed the ^{W.} side of the lake, we are now in OVIEDO Province. At any rate, the lake looks to be glacial, is surrounded by tall granitic formations, and is fairly warm. The surrounding pastures are freely used by cattle and people both and are kept fertile by both. Heavy

5 AUG 75

fog rolls in about 4 pm and looks to be here for the night. From the ^W side of the lake we collected under rocks in what might be called morgia level -- between water and pasture there is some mud, some grassy wet level, and then boulder, etc. to the hills. An adult Psammochromus hispanicus (23532, ♂, 3.2g) was collected on the rocks next to a Lacerta muralis (?) (23624, ♂, 5.8g PHOTO). From under rocks near the shore line a series of Triturus helveticus (23533 [20 larvae @ .1g], 23534-23550, 23601-23617 PHOTO [23617]) whose weights average 0.94g and which range .4, .6, .6, .7, .7, .8, .8, .8, .8, .8, .9, .9, .9, .9, .9, .9, .9, .9, .9, .9, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.2, 1.2, 1.2, 1.3, 1.5, 1.6. ($N=33$, $\bar{x}=.94$). Triturus ^{alpestris} boscai (23618-23620, 618 PHOTO) were also collected at 1.8, 2.0, and 2.8g. ($N=3$, $\bar{x}=2.2g$). Alytes obstetricans (23621-23623, 621 PHOTO) were taken at 1.0, 2.5, 3.5g. ($N=3$, $\bar{x}=1.17g$)

LAGO DE LA ERCINA, EAST SIDE from 2000-2300 hr.

Shoreline much as West side except that granitic formation interferes with water line about $\frac{1}{2}$ way around. Much more natural shore with small stones strewn about.

Bufo bufo (23625-23627 [625-PHOTO], 35.0, 25.0, 24.0g respectively) ($N=3$, $\bar{x}=28g$) found under one large rock. ALYTES OBSTETRICANS 4.6, 3.0, 4.3, 3.3, 4.1, 3.8, 4.1, 3.5, 2.9, 4.7, 3.0, 3.7, 4.2, 4.7, 4.5, 3.0, 4.7, 3.6, 5.0, 2.9, 3.7, 2.0, 1.0g, and eggs collected ($N=23$, $\bar{x}=3.66g$).

Rana iberica (23664, 0.7g) collected under a rock and a series of T. helveticus also found (23628-23639) at the following weights: 1.2, 1.2, 1.2, 1.3, 1.2, 1.0, 1.0, 1.3, 1.2, 1.2, 1.2, 1.2g ($N=12$, $\bar{x}=1.18$).

T. boscai (23665-23670) at 3.1, 3.2, 4.4, 3.2, 3.2, and 2.2g ($N=6$, $\bar{x}=3.22g$). Eggs were found under a rock on upper shore (23671).

We note here that the East side of the lake appears to be more heavily populated and exhibit more Biomass.

6 AUG 1975

SPAIN: OUIEDO PROV; LAGO DE LA ERCINA. Beautiful Morning!

 $T_0 =$ 10:15 am - 12 N, $T_0 = 21^\circ\text{C}$, $T_a = 16^\circ\text{C}$, $T_{H_2O} = 21^\circ\text{C}$.BLACK
BODY
OPEN
SHADE

Went around LAGO ENOL, followed stream to mining camp and found only one ALYTES OBSTETRICANS (23672, 0.6g) in the area of the camp. On the S. side of Lago de la ERCINA is a swamp/marsh from which larvae of Rana ibérica and Triturus helveticus (23711) were collected. T_a was 18° and T_{H_2O} was 23.5°C . Spent most of the afternoon putting up specimens but we ran around the East side of the lake again to get T_b of Alytes obstetricans. A heavy fog joined us at 1600 and stayed through the night.

1930 - 2020

 $T_a: 16.6^\circ\text{C} - 16.2^\circ\text{C}$

T_a WHERE COLLECTED	T_b	SPECIES
19°C	25°C	<u>ALYTES OBSTETRICANS</u>
20	22.2	"
20.4	23	"
21.5	22.5	"
18	21	"
18	20.8	<u>TRITURUS BOSCAI</u>
20	23.2	<u>ALYTES OBSTETRICANS</u>
19.6	22.6	"
19.6	22.6	"
21.0	23	"
21	22.6	<u>BUFO BUFO</u>
21	22.2	<u>A. OBSTETRICANS</u>
19.6	22.2	"
18.6	22.2	"
19.2	21.0	"

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WEST SIDE

2025-2100, $T_a = 16.2 - 16.0^\circ\text{C}$.

T_a	T_b	SPECIES
22.2	22.6	<u>ALYTES</u> <u>OBSTETRICANS</u>
22.5	23.5	"
22	24.8	"
20	21.8	"
20	21.4	"
20	22.0	"
20	22.5	"
22.5	24.2	"
19.5	20.4	"

While gathering these data, we also collected one Lacerta muralis (23673, 1.1g), 13 Alytes obstetricans (23676-23688) at the following weights: 3.1, 3.3, 4.1, 1.8, 4.6, 2.1, 4.4, 3.5, 3.0, 2.3, 2.4, 3.1, --. ($N=12$, $\bar{x} = 3.14\text{g}$), one T. boscai (23675) at 3.6g, and one Bufo bufo (23674, 33.0g) from the East side.

From the west, we obtained: (23689-23698) Alytes obstetricans at 2.9, 2.2, 4.9, 3.4, 1.5, 3.7, 3.4, 2.9, 3.0, 1.6 ($N=10$, $\bar{x} = 2.95$) and one T. helveticus (23699, 1.6g).

Later that evening, from N. of the lake from 2230-2300 a series of RANA iberica were taken (23700-23710, 710 PHOTO). 30, 33, 28, 41, 56, 36, 42, 64, 42, 37, 19g ($N=11$, $\bar{x} = 38.9$)

7 AUG 1975

SPAIN: OUIEDO; LAGO DE LA ERCINA

Left campsite this morning around 1100 under extremely cloudy, foggy skies. Drove to Congos de Onir and on to SALAS. Arrived at Salas at 1600 under warm but cloudy conditions.

7 AUG 1975

CONT'D:

SPAIN: OUIEDO PROV; 6 km W. OF SALAS [= 3 km E. LA PEÑA] ON N634.

Between km 263 and 264 there are 2 bridges on creek flowing down the NE slope of a ridge. The first bridge (6 km W. of SALAS) has a full CANOPY of cover, the second (= 1/2 km W. of 1ST) is partially canopyed.

We surveyed 100 M. upstream from the bridge between 1617 and 1718 HRS ($T_{H_2O} = 16.6^{\circ}C$, $T_A = 18.6^{\circ}C$) and found 8 CHIOGLOSSA LUSITANICA ($23\frac{7}{8}12 - 23\frac{7}{8}20$) weighing .2, .4, 1.4, .4, .6, .6, .6, and 1.7 g ($N=8$, $\bar{x} = .74g$). and an egg mass ($23\frac{7}{8}21$, PHOTO) weighing .5 g.

1728-1828 HRS. 1/2 km up the road to the W. in another stream covered by a massive stone bridge. Working 100 M upstream from the unused bridge behind the HGHwy Bridge, in an area less canopyed and more overgrown (i.e. this is in part of a cultivated field), I found 2 more specimens. $23\frac{7}{8}22 - 23\frac{7}{8}23$ [PHOTO] weighing .3 and 2.7 g respectively.

Perhaps the amount of cover determines the #s of Chioglossa? This second stream is not or completely canopyed.

Later we drove to LA ESPINA, S. to PEDREGAL, LA FLORIDA, BARCA, along PANTANO DE LA BARCA, TO SOTO DE LOS INFANTES, GODAN, and back to Salas. From La Espina to the Pantano coal mining has blackened the earth in many places. The Pantano is not being used except for power and has undoubtedly ruined a valley. There appear to be no suitable habitat for Chioglossa except the area between Salas and La Espina.

8 AUG 1975

SPAIN: OUIEDO PROV; 6.5 KM W. SALAS ON N-634.

Spent last evening encamped up the road from the bridge. Stream temperature 14°C at 2ND locality from yesterday. Searched some from 1310-1410, $T_a = 18.5$, Raining. No luck as there appear to be few areas for Chioglossa to hide.

KM 279 on N-634 1 km S. of CASTAÑEDO (= 9 km S. PONTIGÓN).

$T_a = 22^{\circ}$, $T_{H_2O} = 15.5^{\circ}$, $T_{AIR} = 21^{\circ}$, 1500-1600 HRS.

10 C. LUSITANICA collected (23724-23733) at weights of .5, .4, .6, 1.0, .5, .9, .5, .5, 2.0, .5 ($N=10$, $\bar{x} = .74$)

CANOPIED STREAM, RAPIDLY FLOWING, ROCKY SHORES AND BOTTOM. SPECIMENS FOUND ^{UP TO} $1\frac{1}{2}$ - 2 M from side of water (water's edge) and they appear to prefer wet, ^{ROCKY} soil under loosely settled rocks. Jonie and I spent 1 hour on 100 M. of stream working upstream from the bridge at KM 279. Jonie worked the parallel stream which was stagnant - slow moving, covered with debris of trees, and found only one medium sized specimen which escaped. Apparently, Chioglossa prefer swiftly moving streams, in which pockets of I have found larval specimen and egg mass (sheltered from current but available to the freshening effect of the water droplet-spray), to slow streams. Perhaps, the freshening effect of the water as it moves along aerates the soil, which has been loose sand-loam to date, and cools the animal. 23734, a Pond, also taken here.

Drove along N-634 to REINANTE (LUGO PROV) where we are camped for the night. We saw no other suitable CHIOGLOSSA streams along the route. RAIN all day. Blah. Cold and windy along the road today, hope tomorrow is better.

9 AUG 1975

SPAIN: LUGO PROV; REINANTE

Left and drove S. on N-634 thru MONDOÑEDO, PROBECENDE, VILLALBA, E. TO TUMBO, ESPINEIRA, FERIA DEL MONTE looking for hole indicated on map and NO HAY!

1400-1500, $T_A = 22^\circ\text{C}$, $T_A = 21.5^\circ\text{C}$ RESPECTIVELY.

TUMBO (LUGO), 3 km W. AT RÍO TAMOGA BRIDGE

in area of some ponds close to river. Bank of road lined w/ shale and soil dump under the soil. Collected 1 Rana ridibunda (23735, 22g), 7 Bufo calamita (23736-23742) weighing 5.4, 8.5, 7.5, 6.2, 5.8, 6.0, and 6.7 (23742, PHOTO) grams, 1 Bufo bufo (23743, 17g), 2 Rana iberica (23744, 23745) at 14 and 13g., and 1 Triturus helveticus (23746, 1.6g). A T. marmoratus ♂ was seen in the area but not collected. Numerous R. ridibunda were also observed. Drove back to VILLABA then S. to BAAMONDE, ~~and~~ W. to GUITIRIZ about 3 km, turned S. to national forest of some sort, wandered around but too dry and no cover, came into PUEBLA DE PARGA, drove N. on N-V, thru GUITIRIZ, turned S. on C-544 and drove into Santiago de Compostela.

All today was spent searching for CHIOGLOSSA localities and all streams were either un-covered or too slow, or with not enough cover. Much of this route is farmland, secondary forest of Pine (Pinus pinea?), or burned over. Agriculture is taking its toll here as not even the stone walls and bridges produce much. ULEX appears to be primary underbrush in many areas.

10 AUG 1975

SPAIN: LA CORUÑA: SANTIAGO DE COMPOSTELA.

Left traveling E. on C-544 to C-547 and followed 547 to ARZUA, MELLID all of which is choppal. Stopped 3 km W. of LUGO Prov Border (on C-547) near km 557 from 1400-1500.

10 AUG

Collected one LACERTA (23747, 3.3g) in PROV. LA CORUÑA near LEBOREIRO on a stone wall just off C-547.

Entered PROV. LUGO and drove S. thru SAMBREITO,

Most of this route in Agr. country.

Embalse and PANTANOS

one artificial flooding and most good for herps

except R. idibunda which seem to prefer stagnant H₂O to an Embalse.

MONTEROSO, TO TABOADA, TO PANTANO DE BELESAR, S. on N-540 TO CHANTADA, TURNED E. ON C-533 STOPPED AT PANTANO DE BELESAR (GRAPE COUNTRY), FOUND NOTHING, THRU MONFORTE DE LEMOS, QUIROGA (DEFORESTED + BURNED), TO LA RÚA, TURNED NE ON N-120, STOPPED FOR NIGHT NEAR SALAS DE LA RIBIERA. AT EMBALSE DE PUMARES OR RÍO SIL.

COLLECTED 1520-1620 AT PROV. LUGO, S. SIDE OF VILELA (ON N-540). $T_A = 26^\circ$, $T_{H_2O} = 32^\circ C$. Got 1 LACERTA

(23748, 5.8g) a series (23752 [11]) of juv. Rana idibunda at .7, .6, 1.1, 1.2, .7, .4, 2.3, .4, .6, .6, .5, .6, 1.1, and 32 grams. The larger specimens are tagged 23749-23751.

2 km W. of LA RÚA (PROV. ORENSE), between km 2 and 1 on C-533, a DOR MALPOLON MONSPESSULANUS (23753) was picked up and saved.

^{LEON}
~~ORENSE~~ prov, between km 30 + 31 on N-120, near SALAS DE LA RIBIERA AT EMBALSE DE PUMARES on RÍO SIL

3 Rana idibunda (26.6, 16.0, 5.0 g) 23754-23756 were collected ca. 2230 hrs.

11 AUG

LEON ~~ORENSE~~ PROV., SALAS DE LA RIBIERA

Departed on N-120 driving NE. Stopped 1030-1230 at LAGO (natural but un-named) in LEON PROV. from 1100-1230.

car 60967

1 km. E. ^{CARCEDERO} CARUCEDO on N-120 captured 1 LACERTA LEPIDA (23757, 74g) with help from locals who were moving a rock pile. Also in a rock pile, 1 NATRIX MAURA (23758, 85g) was captured at 1215 HRS.

Drove on from here to RONFERRADA where we had lunch and then to N-VI through REMBIBRE TO ASTORGA where we took N-120 TO LEON where we stopped for the night. All along this route

11 AUG

we stopped at various streams but could not find any CHIDGLOSSA and did find much of the area was burned over and flat countryside, exposed streams, and choppy.

12 AUG 1975

SPAIN: LEÓN PROV; LEÓN

Departed León on N-630 to LA ROBLA, E on C-626 to CANDANEDO DE FENAR. From 1300-1330 we collected in vic of 1 km. W. (KM marker 18-19 on C-626) in a very polluted, semi-damp, stream bed where 2 LACERTA MURALIS (3.2 + 4.0g) were taken (23759-23760) at a $T_A = 24^\circ\text{C}$. Moved 1 km W of ROBLES DE LA VALCUEVA near a stream with no name (1 km W. of intersection with LE-311 of C-626). From 1335-1405, $T_A = 24^\circ\text{C}$, we collected 4 Lacerta muralis (2.6, 7.4♂, 6.1♂, 6.4♂) from around the banks and bridge over the River (23761-23764). Turned N on LE-311 to VEGACERVA where from 1500-1520, $T_A = 27.5^\circ\text{C}$, on the RÍO TORIO, we collected 1 LACERTA MURALIS (♂, 6.8g, 23765). Continued N. to FELMIN where we turned W. to VALPORQUERODE and the CUEVA DE VALPORQUERODE where from 1900-2030, $T_A = 20^\circ$, $T_{H_2O} = 13^\circ\text{C}$, we collected 9 Tadpoles of RANA (23766) NW of the outside entrance to the cave in a stream pond. Taken from rocks at head of stream in ICE cold water.

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SPAIN: LEÓN PROV; VALPORQUERODE (near VEGACERVA)

From 1030-1215 I searched the rocks in the area for Vipera, etc. and found only 1 LACERTA MURALIS (23767, 2.5g) although other individuals were seen. 1 mole (jet black) and a vole were also seen. It was an overcast day and the area is heavily grazed by sheep and goats. We returned to FELMIN, turned N. to LE-311 and stopped from 1230-1400 at the RÍO VALVERDIN which crosses LE-311 and where RÍO TORIO intersects with it. Also here is the intersection of LE-311 with

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the road to VALDETEJA. We were (by road) 42 km N. of LEON, 2 km S. of CARMENES, 13 km W of VALDETEJA. Here we collected Bufo bufo (23768, 77g), LACERTA MURALIS (23769-23779) and weighed 3.6, 4.2, 5.7, 3.6, 4.6, 4.3, 6.1, 3.6, 2.9, 3.4, 5.0. An Anguis fragilis (23780, 18.0g, PHOTO) was taken under a rock along the road. It appears that the Eucalyptus shade and the stream form a nice habitat pocket here for these 3 spp.

Drove N on LE-311 through CARMENES to CAMPO where we turned around. 3 km N. CARMENES (= .5^{km} S. OF CAMPO) we collected an ANGUIS FRAGILIS (23781, 27.0g) and a L. muralis (23782, 7.0g), both under rocks in a cultivated field. This area was also near the Rio TORIO. We also saw many Bufo bufo (?) tadpoles in the River. 2.5 km S. of CAMPO at 1524 a D.O.R. Bufo bufo was seen on LE-311. We went back down to road to VALDETEJA

and turned East. At 1533 one D.O.R. Bufo bufo was seen on LE-313 at .5 km W. PEDROSA. Proceeded to I with road to LA VECILLA and turned S. In LA Vecilla, picked up C-626 East to BOÑAR where we turned N. on LE-331.

From 1700-1730 we stopped at the RIO ~~PORMA~~^{PORMA}, 1 km. S. of VALDECASTILLO, where the flow of the stream is acceptable, the shores look good with cover available, but there is trash in the water by the bridge, the shores and H₂O have rust coloring from some sort of waste procedure. This area may have been Chioglossa habitat in the past. Proceeded N. past Pontono PORMA (barren shore, no habitat) through Puebla de Lillo. Took left branch of road to ISOBA where we camped for the night under cloudy skies and pouring rain. 1st down cold here and the sanitary facilities empty directly into the stream.

Possible
Chioglossa
habitat

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SPAIN: LEON PROV; N. OF ISOBA

0900-0930, collected a tadpole series (23783) from .5 km N. of Ioba from the Río DE ISOBA, $T_{H_2O} = 11.4$, $T_A = 11^\circ C$.

1100-1300, LAGO DE ISOBA, .5 km S. OF ISOBA and

there is no second lake contrary to what map indicates. Walked around the lake in pouring rain and turned over many rocks of granite which shelter amphibians. The lake itself is filled with Rana ridibunda and R. iberica, the images of which are prevalent at this time. We collected: 19 HYLA ARBOREA (23784, ca. 0.3g),

22 RANA RIDIBUNDA (23785-23806 at the following weights: 2.0, 2.3, 3.4, 1.9, 2.8, 2.7, 1.8, 3.4, 1.5, 1.8, 1.6, 1.5, 1.4, 3.3, 2.0, 1.3, 1.5, 1.5, and 1.2 g [$N=19$, $\bar{x}=2.04$]) ♂♂ adults at 17, 20, and 14.5 g ($\bar{x}=17g$),

and 20 ALYTES OBSTETRICANS (23807-23826, at the following weights: 1.2, 1.4, 1.0, .8, 1.0, .6, .8, 1.0, 1.0, 1.0, 1.2, 1.0, 1.2, 1.2, 1.0, 1.2, 0.8, 1.4, and .6 g [$N=19$, $\bar{x}=1.02$] and an adult at 6.4g), RANA IBERICA

(23827(5)-23829 at: .4, .4, .4, .4, .4, 21.0, 10.0g) and Bufo bufo (23833 at 26.0g), LACERTA MURALIS (23830-23832, at 4.8, 4.0, and 6.6g [$N=3$, $\bar{x}=5.13$]),

TRITURUS BOSCAI (23834-23845, at 2.7, 2.4, 1.8, 1.6, 3.5, 2.4, 2.0, 2.2, 2.1, 2.5, 2.9, and 21g [$N=12$, $\bar{x}=2.35$]), TRITURUS

HELVETICUS (23846-23850 [9], at 1.4, 1.2, and 1.4g [$N=3$, $\bar{x}=1.33$] and

.4, .3, .3, .4, .4, .4, .3, .2, .2, .2g), and ^{23852 = ZOOTOCA VIVIPARA} PSAMMODROMUS ALGIRUS (23851-23852, at .2 and .4 [$\bar{x}=.3$]) from this area which is 1 km N. of a TALC Mine.

Took LE-331 South through PUERCA DE LILLO and

turned N. through COÑAL to Río PORMA at 6 km S. of C-635 between KM 29+30 (1625M alt) at ^{6 km S.} PUERTO DE TARNA (LEÓN PROV.) where I surveyed from 1700-1730. $T_{H_2O} = 12^\circ C$, $T_A = 13.4^\circ C$, River flow is substantial and fast enough but I believe the H_2O is too deep at present. No rock on the limited banks of Río, just stream bed mossy rock but little water; ~~none where~~ Chioglossa may live here, none were found but it's possible they have "dug in" for the summer.

TALC Mining

8/1/2016

⇒

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Turned S. on C-635 and drove to .5 km N. LA UÑA (1800) where a D.O.R. Bufo bufo was seen. At 1815 hr another D.O.R. Bufo bufo 2 km N. of LARIO. Proceeded S. to RIAÑO where we got gasoline, turned N. on C-635; at I of C-637 turned on to C-637 and drove N. to OSEJA DE SAJAMBRE where at about 1930 hrs we met with PETER W. HOPKINS for the second time.

NOTE: It has been raining since 1800 @ LA UÑA and is following us around. We left Peter ca. 2200 HRS and drove S. still on C-637.

2155, pouring rain, 7 km S. of OSEJA, 2 Bufo (23913-23930) bufo collected A.O.R. 9 km S. of OSEJA, $T_A = 16^\circ$, found 3 B. bufo (A.O.R.) + 1 D.O.R. B. bufo. 11 km S. of OSEJA, 2210, 2 B. bufo at Río SELA crossing (FUENTE DEL INFIERNO). 12 km S. OSEJA, 2214, 1 live SACAMANDRA SACAMANDRA and 2 D.O.R. (23853-23911). 13 km S. of OSEJA, 1 TRITURUS

HELVETICUS (23912) @ 2.0 g, 4 Bufo bufo (23913-930), AND 1 S. salamandra (23853-23911) 1273.8m

PTO. PANDERRUEDA; 5 km from the point we found 4 Bufo bufo and 5 Salamandra salamandra. At 4 km from (S.) the point I started taking T_B and T_A (T_{ROAD} started at 3 km S. of the point). At 4 km from the point I got 25 SACAMANDRA SACAMANDRA and stopped collecting Bufo bufo which were also very common on the road (more so than Salamandra). At 3 km S. of PTO PANDERRUEDA we collected 13 S. salamandra and it was 2317 hrs (+ a few minutes for stopping, it was a long km with temperatures, etc - see next page). 2 km from PTO it had stopped raining, and the road started drying out, we collected 10 Salamandra salamandra. It started raining 2327 HRS and continued with heavy fog past

14 AUG 75

midnight. 1 km S. of the PTO, I stopped taking T_s and found 8 Salomandra salomandra. We stopped and camped at the MIRADOR DE PIEDRASHITAS (9.6 km from POSADA DE VALDEON). N43, 124955 W4.981619

SALAMANDRA SALAMANDRA TEMPERATURE DATA ($^{\circ}\text{C}$)

<u>T_{ROAD}</u>	<u>T_A (1 km ↑ rd)</u>	<u>T_B</u>	<u>TIME</u>
—	12.6	16.0	2220 HRS
—	"	14.0	
—	"	14.0	
—	"	14.5	
—	"	14.0	
—	"	14.6	
—	"	15.5	
—	13.6	14.6	
—	12.4	14.6	
—	12.6	15.5	
—	12.4	14.0	
—	13.0	14.5	
—	13.0	15.0	
—	12.8	13.8	
—	12.5	14.0	
—	13.6	14.4	
—	12.5	14.4	
—	12.8	13.3	
—	"	14.0	
—	12.5	13.5	
—	"	14.4	
—	"	13.8	
13.0	12.6	14.5	
15.0	12.6	14.8	

14 AUG 75

T_{ROAD}T_AT_BTIME

15.2

12.5

14.9

15.0

13.0

14.6

15.0

12.6

15.0

2317 HRS

15.0

12.0

14.6

Stopped Raining / road
starting to dry out

13.6

11.0

15.0

14.2

11.5

14.6

Started raining again

12.6

10.2

14.4

2327 HRS

12.4

11.0

13.6

13.0

11.0

14.0

14.011.513.4

N =

12

34

34

 $\bar{X} =$

14.0°C

12.4°C

14.4°C

~~15 AUG 1975~~~~SPAIN: LEÓN PROV; MIRADOR DE PIEDRASMITAS~~BODY WEIGHTSSALAMANDRA SALAMANDRA

15, 23, 26, 20, 15, 11, 13, 14, 13, 7, 19, 13, 17, 19, 10, 9, 11,

13, 10, 11, 9, 10, 14, 14, 10, 9, 11, 11, 10, 8, 10, 12, 15,

10.5, 8, 9.5, 9, 16.5, 12, 7, 13, 7, 11, 18, 16, 10, 6, 10, 9,

12, 11, 11, 9, 10, 4, 7, 8, 5.5, 4 (N = 63, $\bar{X} = 12.29g$)

59

BUFO BUFO

125, 115, 120, 57, 50, 42, 44, 41, 55, 30, 37, 33, 24, 27,

27, 5.8, 4.4, 3.0 (N = 18, $\bar{X} = 46.7$)TRITURUS HELVETICUS

2.0g

15 AUG 1975

SPAIN: LEÓN PROV; MIRADOR DE PIEDRASHITAS.

Preserved last night's catch, in part, and left about 1300. Drove back to C-637, headed N., and stopped at Río Sella crossing FUENTE DEL INFIERNO.

Checked both forks of Río Sella 1330-1530, $T_A = 14^\circ$, $T_{H_2O} = 13^\circ C$. WATER flow O.K., little siltation, water level possibly too low although banks indicate a normal level of flow. The streams are conopied but no Chioglossa were found after a 100 M survey on each of the 2 forks about 200 M upstream from the bridge on C-637.

at FUENTE DEL INFIERNO, I collected 2 Lacerta muralis (23940-41; 4.4 and 6.4 g) and a Bufo bufo (23942, 58 g).

Returned to Oveja de Sajambre and followed the path to CAPITA SAN ROQUE from 1600-1800. Along this patch, we collected 7 LACERTA MURALIS (23931-937, 5.4, 1.5, 3.8, 3.9, 4.6, 2.2, and 4.4 g [$N=7$, $\bar{x}=3.68$], 1 ANGUIS FRAGILIS (23938, 12.5 g) and a CORONELLA AUSTRALICA (23939, 43.5 g. PHOTO)

Took C-637 N to CANGIS DE ONIS, turned E. on C-6312 and drove to LA ESTRADA (OVIEDO PROV) where from 2000-2030 I surveyed a stream with little shore cover, much siltation and some blue-green algae evident (polluted). The stream had a sandy bottom and I think Chioglossa prefer stone or sandy-rock of a coarse type. There were newly hatched ALYTES in this stream.

After AVIN we turned N. on road to MERE and BARRO. Followed road to N-634 where we turned E. Arrived in LLANES where we camped.

16 AUG 75

SPAIN: OVIEDO PROV; LLANES, EL BRAD campground

16 AUG 1975

Spent the day preserving and catching up on notes.

1530-1600, on the walls in and near campground with aid of a bunch of kids from Bristol, England, collected 3 Lacerta muralis (23943-45; 2.2, 2.2, 6.0g).

17 AUG 1975

SPAIN: OVIEDO; LLANES, EL BRAO CAMPGROUND.

Left LLANES at 1000 HRS, ON N-634, turned S. to O-211. From 1115-1135, stopped at Río LAS CABRAS (.25 km N. LA HUERA DE MERE), to look for CHIOGLOSSA. $T_A = 18.6$, $H_{H_2O} = 15.6^\circ C$, water flow all right, stream not canopyed, not many rocks on shoreline. Saw nothing.

From 1142-1200, on Río LAS CABRAS, 1 km N. MERE. $T_{H_2O} = 15.4$, $T_A = 18.8^\circ C$. Water flow O.K., partial canopy, soil under bank rocks dry, sandy loam; spider, ants, and centipede present.

Continued S. ^{until} met C-6312, turned E. to LAS AREÑAS DE CABRALES where we met with Peter W. Hopkins once again. He told us of his Vipera berus from Soto de Sajambre and the Anguis fragilis from LAS AREÑAS. For lunch we visited the road S. to Pontón and CAMARMEÑA and SOTRES and returned after seeing nothing but scenic beauty. Returned to LAS AREÑAS. From 1920-2020, we collected in the foothills to the W. of town which is largely terraced pasture and some chapparal. Looked under hundreds of rocks and found one CHALCIDES CHALCIDES (23946, 12.5g). Mostly a day of rest with a touch of dizziness. Spent evening talking to Peter Hopkins who still saunters bitter about Valverde and Castro-viejo at the station in Sevilla.

18 AUG 1975

SPAIN: OVIEDO; LAS AREÑAS DE CABRALES

1000-1200, collecting at Río CARES and at a stream feeding el Río (5 km. E. of LAS AREÑAS at a fishing area with cement steps). 2 LACERTA MURALIS (23947-23948; 3.7, 3.4g) from stones along path running // to stream. Checked stream for Chioglossa:

$T_{H_2O} = 15^{\circ}C$, $T_A = 18^{\circ}C$. Conspicuous stream w/ rapid flow, moss covered rocks, small stone bottom, no Chioglossa but habitat looks O.K.

1426 left LAS AREÑAS, proceeded E. on C-6312 to PANES where we turned S. on N-612. At 1538, we found a DOR NATRIX NATRIX (23950) on N-612 between KMS 420 and 421 in PROV. SANTANDER, 10 km N. of OVIEDO.

AT POTES
Turned W. ON N-621, to FUENTE DE where road ended and we turned around (at PARADOR). On the way back between 1700-1720, I survived, (on N-621) between km 18 + 19, 3 km W. COSGAYA, the Río DEVA:
 $T_{H_2O} = 15^{\circ}$, $T_A = 17^{\circ}$. Rapid flow, silted bottom, detergent pollution.

We returned to POTES and turned SE on C-627. At 5 km N. of AREÑAS ^(PALENCIA PROV.) (1900) a Baby Bufo found in a pond $\approx$ alpine meadow at 1900 M. (also 1900 Hes).

Continuing on our way to Palencia, at CERVERA DE PISUERGA turned E. onto P-212 to AGUILAR DE CAMPOO (we passed PANTANO DE AGUILAR DE CAMPOO = doesn't look like good habitat as do none of the PANTANOS). At Aguilar we picked up N-611 to Palencia. In Palencia we took N-620 to VALLADOLID where we camped for the night. Most of the area driven through looked like wheat fields or pastureland.

19 AUG 75

SPAIN: VALLADOLID PROV; VALLADOLID.

Left at 1330 on N-620 to SALAMANCA. In Salamanca at 1600 we surveyed Río TOERMES where Rana ridibunda were common but not collected. Took N-630 S. to BÉJAR; in Béjar, turned on road to CANDELARIO and camped in the SIERRA DEL CANDELARIO.

20 AUG 75.

SPAIN: SALAMANCA PROV; CANDELARIO.

Surveyed Sierra del Candelario by Mirador. Dry Pine forest and nothing was seen. Even Lacerta were unavailable.

Returned to Béjar around 1000 HRS, proceeded N on N-630, turned E. on C-500 toward EL BARCO DE AVILA. At Border of SALAMANCA and AVILA, 1100-1200 HRS, I saw one young Acontodactylum erythrum in a hayfield 2 km W. OF S. BARTOLOMÉ DE BÉJAR. 1215 HRS, reached a bridge .25 km W. OF S. BARTOLOMÉ DE BÉJAR I saw 1 Lacerta hispanica and 1 L. sp. (large + green, saw head only from below a bridge). 1230 HRS, at sign for S. BARTOLOMÉ DE BÉJAR at bridge at km 13, 2 LACERTA SCHREIBERI (23951-23952, ♂, 12g + 15g).

Drove on to bridge over creek in BECEDAS where I found one LACERTA MURALIS (23953) at 1244 [3.8g]. $T_A = 33.5^\circ\text{C}$. At 1250-1310 passed a bridge 1 km W. of PALACIOS DE BECEDAS where I found LACERTA LEPIDA (23954, 24.0g, $T_B = 36.8$), L. SCHREIBERI (23955, 12.0g, $T_B = 33^\circ$, ♀) AND 1 L. HISPANICA (23956, 2.8g, ♂).

1335, 3 km N.W. EL BARCO DE AVILA between km 26 + 27, we found 1 D.O.R. Elaphe scalaris (23957, NO WEIGHT). At 1400, in a stream 1 km SW of EL BARCO de Avila we observed RANA ridibunda in the stream off N-110.

20 AUG 75

5 km SW EL BARCO DE AVILA AND 1 km NE CANALEJA
(1405) found 1 L. HISPANICA (23958, 3.8g). At 1415,
we saw a Bufo bufo DOR ON ROAD TO C° DE LA CENTRAL
DEL CHORRO AND SOLANA (CA. 2 km. E SOLANA DE BÉJAR).

1440, we arrived at gate to LAGUNA DEL DUQUE which
is a gov't owned power plant w/ aqueduct and pipelines.
Turned around, returned to N-110, proceeded N. to
El Barco del Avila again where we turned SE
on C-500. At 1700, 4 km W. of LA ANGOSTURA
between km 13+14, 1 LACERTA SCHREIBERI (23959,
16.0g) collected. Proceeded to SAN MARTÍN DEL
PIMPOLLAR where 1 Lacerta schreiberi ^{PHOTO} (23960, 48g)
was taken at compound behind SERVICIOS. THUNDERSTORM

21 AUG 75

SPAIN: AVILA; SAN MARTÍN DE PIMPOLLAR.

Collecting locally.

0830 = $T_A = 14^{\circ}\text{C}$

0900 = $T_A = 14.6^{\circ}\text{C}$

0915 = $T_A = 17.1^{\circ}\text{C}$

Lacerta sp. juvenile seen active on sunny side of rock.

0945 = $19.4^{\circ}\text{C} = T_A$

L. sp. still sunning/feeding on small insect on adjacent
rocks.

0950 = L. hispanica taken from rock

THE FOLLOWING RE: L. hispanica TAKEN

TIME	T_A	T_B	NOTES
1005	✓22.4	28.4	In sun on rock
1017	✓25.6	25.4	" "
1020	✓23.0	33.4	" "
1024	✓22.8	34.9	" "
1030	✓29	34.8	" "

21 AUG 75

TIME	T_A	T_B	NOTES
------	-------	-------	-------

1032	✓22.5	34.8	In sun
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1041	✓24.8	34.3	" "
------	-------	------	-----

1050	✓23.8	32.2	" " Light slate grey snake seen
------	-------	------	---------------------------------

1100	✓22.8	35.5	
------	-------	------	--

L. SCHREIBERI	1110	29.5	37.5	$T_{AIR} = 24^{\circ}C$. In bush.
---------------	------	------	------	------------------------------------

	1120	✓27.8	36.7	
--	------	-------	------	--

	1125	✓34.5	36.6	
--	------	-------	------	--

	1127	✓26.4	36.3	
--	------	-------	------	--

	1137	✓26.8	35.0	
--	------	-------	------	--

	1138	✓19.5 (shade)	33.0	He was in sun.
--	------	---------------	------	----------------

L. SCHREIBERI	1147	28.0	37.2	IN SUN
---------------	------	------	------	--------

	1219	✓26.4	34.8	
--	------	-------	------	--

L. SCHREIBERI	1228	29.4	37.0	
---------------	------	------	------	--

	1233	✓31	38.4	
--	------	-----	------	--

L. <u>HISPANICA</u>	T_A	$N = 16$	$\bar{X} = 25.57^{\circ}C$
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	T_B	$N = 16$	$\bar{X} = 34.03^{\circ}C$
--	-------	----------	----------------------------

L. <u>SCHREIBERI</u>	T_A	$N = 3$	$\bar{X} = 28.97^{\circ}C$
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	T_B	$N = 3$	$\bar{X} = 37.23^{\circ}C$
--	-------	---------	----------------------------

L. HISPANICA (23961 - 23979: WEIGHTS FOLLOW RESPECTIVE ORDER, I.E. 23961 WEIGHED 5.4g) WEIGHTS:

5.4, 4.8, 4.2, 3.1, 3.6, 3.8, 4.2, 3.8, 6.4, 3.8, 3.0, 6.2, 2.4, 3.8, 3.2, 3.4, 2.6, 2.6, 3.8g ($N = 19$, $\bar{X} = 3.9g$)

L. SCHREIBERI (23980 - 23982, 1B1B) WEIGHTS:

55.0, 37.0, 23.0g ($N = 3$, $\bar{X} = 38.3g$)

21 AUG 75

1854 - 1937 HRS, SURVEYED a hill to the W. of San Martín de Pimpollar (Ávila). 1904 HRS, $T_A = 28.0^\circ\text{C}$, under rock a CHALCIDES CHALCIDES (23983, 6.4g) at $T_A = 32.8^\circ\text{C}$ found.

2200-2245 HRS, Surveyed stream (polluted) behind San Martín. 2230 HRS, one Rana ridibunda (23984, 86g), cold wind, storm rolling in and we went back to the tent.

22 AUG 75

SPAIN: ÁVILA; SAN MARTÍN DE PIMPOLLAR (LA CHOZA DE GREDOS)

0900 = $T_A = 9.8^\circ\text{C}$, winds ca. 20 MPH.

We left at 1000 HRS on C-502 to Ávila where we took N-110 to SEGOVIA and stayed night in Segovia waiting for weather to change.

23 AUG 75

SPAIN: SEGOVIA; SEGOVIA

Left at 1100 HRS. $T_A = 12^\circ\text{C}$ and winds ca.

20 mph.

Took N-110 to C-606 to C-603 at

1200 HRS Surveyed a Pinus forest on C-603 between km 35 and 37. $T_A = 18^\circ\text{C}$ and chilly wind. Found

nothing in this MONTE DE UTILIDAD PUBLICA of scarce undergrowth and sand surface. Surveyed another very similar area at 1450, 2 km from NAVES DE ORO ($T_A = 18^\circ$).

1557 HRS, in vic COCA, $T_A = 22.4^\circ\text{C}$, another pine forest.

Drove to Segovia, left on N-601 to South to NAVACERRADA (MADRID), turned E. on C-~~502~~⁶⁰¹ to Cercado and NE to MANZANARES EL REAL where we spent the night

24 AUG 75

SPAIN: MADRID; MANZANARES EL REAL (in MTS. above by campground).

1000-1200 HRS, Surveyed MTS. to NE of MANZANARES and found several Psammodrormus ALGIRUS whose data follow:

24 AUG 75

TIME	T_b	T_A	NOTES
1007	33.6	16.5	
1020	33.4	27.5	
1027	33.4	17.6	
1039	40.6	21.2	
1045	39.2	21.6	
1049	37.1	22.4	
1054	34.0	26.0	
1059	34.0	23.0	
1101	35.8	23.5	
1120	30.4	20.5	
1126	37.0	23.0	
1130	37.8	25.5	

And 1 Acothodactylus erythrus at 1110, $T_b = 34.4$, $T_A = 24.0^\circ\text{C}$ and the weight of this specimen (23997) was 5.9 grams.

The vegetation was primarily CISTUS LADANIFER (L.) and LAVANDULA STOECHAS L. and was at a fairly high (1500) altitude where these two species occurred together.

Psammochomus alpinus (23985-23996, weights follow respective order):

13.5, 5.8, 7.4, 4.7, 7.9, 6.6, 9.8, 9.2, 8.6, 5.8,
7.2, 6.0, $N = 12$ $\bar{X} = 7.7$

Left at 1230 hrs for VILLABA and EL ESCORIAL.
Continued S. on C-501; at 1923 we found one
MALPOLON MONSPESSULANUS (23998) DOR. at 7 km E.

⊥ w/ C-502 (≈ 8 km ENE ARENAS DE SAN PEDRO on C-501)

24 AUG 75

between km 116 and 117.

Continued on C-501, turned NW to GUI SANDO where we spent night at LOS GALAYOS campground

25 AUG 75

SPAIN: ÁVILA; LOS GALAYOS AT GUI SANDO.

LOS GALAYOS (LA MIRA) at the area where ICONA has 2 houses and a statue of a goat.

1025-1230 HRS, in a montane area of granite rocks with ferns and grasses, we found, amid the pines, several Psammobromus ALGIRUS as follows:

TIME	T_b	T_a	
1025	36.0	27.0	
1035	35.5	26.0	N=15
1039	36.0	24.6	LOW 32.0 20.4
1046	32.8	26.2	HIGH 38.6 32.0
1103	33.8	20.4	$\bar{x}$ 35.24 25.04
1105	32.0	22.6	SE 0.48 0.86
1111	34.0	21.6	95% 34.2-36.3 23.20-26.9
1118	35.0	23.0	VARIANCE 34.26 10.554
1122	37.0	24.5	
1126	32.8	23.2	
⁴ 1137	35.8	28.5	
1153	35.6	23.6	
1156	37.3	30.4	
1212	38.6	32.0	
1228	36.5	22.0	

$$N=15 \quad \bar{X} = T_b = 35.2^\circ \text{C}$$

$$\bar{X} = T_a = 25.0^\circ \text{C}$$

and 2 Lacerta hispanica (23999-24000, 12.4 and 0.4 g respectively, ¹⁰⁵⁷₁ $T_b = 32.4$, $T_a = 21.6$ and 1134, $T_b = 30.8$, $T_a = 29.0^\circ \text{C}$ respectively).

25 AUG 75

Pseudochomus alpinus (²⁴⁴⁰¹⁻²⁴⁴¹⁵~~24001-24015~~) weights respectively:
5.4, 8.8, 6.3, 4.2, 5.6, 7.8, 6.4, 10.0, 9.0, 7.1, 8.4, 7.9,
6.9, 9.1, 12.5 $N=15$; $\bar{X}=7.69$

1819, at campground, we were given one CHALCIDES
CHALCIDES (⁴24016, .55g).

1300, D.O.R. NATRIX MAURA on road to ICONA
camp area.

2100, a NATRIX MAURA was collected in a pool
to the S. of the camp on the Rio Pelajo N. of GUI SANDO
(⁴24017, 24g)

We went night driving from 2130 to 2345 along
the roads from GUI SANDO to ARENAS DE SAN PEDRO, turned
W. to CANDELEDA on C-501 sin VER NADA.

26 AUG 75

SPAIN: ÁVILA PROV; GUI SANDO

Drove to Guisando where we turned E. on
a dirt road into the MTS. From 1000-1015, ca. 4 km
NE. Guisando, on a large granite outcropping with an E.
exposure I saw one Lacerta hispanica at 1015. Nothing
else noted.

⇒ 1045, surveyed another area of rock
outcroppings but no Vipera seen. One Pseudochomus
alpinus (⁴24018, 5.4g) at $T_B = 36.8^\circ\text{C}$, $T_A = 23.0^\circ\text{C}$.
Returned to GUI SANDO and drove to ARENAS DE SAN
PEDRO where we turned N. on the road to EL HORNILLO.
Between 1200-1215, on a bridge 5 km N. of EL HORNILLO
I juv. L. schreiberi (⁴24019, 1.3g) captured; at 1310 2 km
from MONTE #11 DOMINGO FERNANDO (EL HORNILLO) (ICONA SITE) 1 L. hispanica
on a rock wall (⁴24020, 0.6g). 1317, almost at
ICONA site, a Elophis scalaris DOR (⁴24021) collected.

1507, 4 km N. EL ARENAL another Pseudochomus

26 AUG 75

algium found (24022, 5.6 g, $T_B = 37.4$, $T_A = 33.4$).
 Returned to camp at 1700 and found
 the following waiting for us:

- 2 LACERTA HISPANICA (24023-24, .6 + 1.0 g)
 1 RANA IBERICA (24025, 3.0 g)
 1 P. ALGIENS (24026, 0.6 g)
 1 NATRIX MAURA (24027, 29.5 g)

27 AUG 75

SPAIN: ÁVILA PROV; GUIRIZO

Left about 0930 HRS, drove thru Arenas de San
 Pedro to Mombelton, P^{to} del Pico, turned E. at
 Venta de Rosquilla to S. Martín del Pimpollon
 and Hoyos del Espino where we turned S. to
 the Refugio del Club Alpino (ca. 13 km S) and
 then walked in to the REFUGIO DEL REY near ALMANZOR.
 We reached the REFUGIO at 1125 HRS and walked in
 until 1340 where we lunched at the lake. The
 following specimens were collected and the data are
 as follows:

LACERTA MONTICOLA

<u>TIME</u>	<u>T_b</u>	<u>T_A</u>	
1131	34.0	22.5°C	
1139	28.8	13.4	
1150	31.8	17.5	
1153	31.0	17.8	
1200	33.4	17.8	
1343	33.8	20.6	Green specimen
1345	34.5	16.0	"
1442	25.8	16.4	"
1540	34.5	24.0	

	TIME	T_b	T_A
27 AUG 75	1610	32.0 °C	21.0 °C
	1647	30.5	22.8
	1720	28.4	13.4
	1746	34.0	19.5
	1753	32.4	19.0
	$\bar{X}_S \pm T_b$	$N=14$	$\bar{X}=31.8^\circ\text{C}$
		T_A	$N=14$
			$\bar{X}=18.7^\circ\text{C}$

Small frogs (^{24445-24449-24450 [clonal series]} Rana iberica) collected from N. side of Laguna grande where $T_{H_2O} = 19^\circ\text{C}$ in shallows at 1425. Also collected one Salmonella s. bijanae (almogoris ??) [24444] from N. end of lake from under rock in shaded area at 1452 which weighed 10.5g.

Arrived back at car at 1825 HRS, started back to Madrid and at 1 km S. Hoyos del Espino (at Rio Tormes) at 1840 one Rana ridibunda DOR seen. Arrived in Madrid on 28 AUG 75 @ 0200 HRS.

Weights on Lacerta monticola

#	WEIGHT	NOTES
CM 60904 24430	7.2	PHOTO (brown)
CM 60905 24431	9.4	PHOTO (green)
432	5.7	
33	1.9	
34	6.1	
35	6.4	
36	7.6	
37	7.6 + 1.4 (TAIL) = 9.0g	
38	7.0	
39	6.2	

#	WEIGHT	NOTES
24440	6.4	
41	1.9	
42	2.0 + .6 (2.6)	TAIL ATTACHED
43	2.5 + .2 (2.7)	TAIL ATTACHED

$$N = 14 \quad \bar{X} = 5.7g$$

28 AUG 75 Visited DR. ORTIZ at the MNCN (MADRID) and examined Cádiz specimens in his collection. They don't have many but what is there appears well curated. Used rest of day to ship equipment back to Smithsonian from Embassy.

29 AUG 75 Turned in car and did shopping plus note taking and transcribing.

30 AUG - SIGHTSEEING IN MADRID + FLIGHT HOME.

1 SEP 1975

PLANE FARE = \$470.00

AUTO RENT = 386.74

GASOLINE = 90.95

EXPENSES = 390.00

\$1337.69

473 specimens

\$283/specimen

\$43/day

END

1975

(NW SPAIN)

LODGING = \$111.55

FOOD = 141.71

MISC = 136.69

267.71

350.00

MADRID - BURGOS - SANTANDER - LEON - SANTIAGO - VALLADOLID -
OUIEDO - SALAMANCA - AVILA - SEGOVIA - EL ESCORIAL -
MADRID.

A GOOD TRIP



USNM Acc # 318377
CM Acc # 3111 + 3144 (RECEIPT #)

CMFS 23508-23514

BUFO BUFO

23508-10 = CM 60846-48

23511-13 = USNM

199057-59

23514 = MADRID

SPAIN: SANTANDER; VIC. SANTILLANA DEL MAR.

2 AUG 1975. S.D.B. + J.S. PETERS. DOR/AOR

ON HIGHWAY AFTER HEAVY RAIN, 10-10:30 pm,

CM 60911
23 23515

LACERTA ~~SP~~ MURALIS

SPAIN: OUIEDO PROV; 1 km N. PANES ON N-621 4 AUG 75

1315, ON ROCK WALL, S.D. BUSACK WT: 6.2

CM 60917 23516

LACERTA MURALIS

SPAIN: LEÓN PROV; SOTO DE SAJAMBRE, 1 km. S. 4 AUG 75

1820 hrs, S.D. BUSACK WT: 4.5

23517-23 = CM 60918-24

23517 - 23531

LACERTA MURALIS

23524-30 = USNM

199186-92

23531 = MADRID

SPAIN: LEÓN PROV; OSEJA DE SAJAMBRE, 2 km N. ON C637

1030-1200 HRS, $\bar{x} T_b = 34.9^\circ C$, $\bar{x}$ WT ♂♂ 4.5 ♀♀ 2.8, 5 AUG 75

S.D. BUSACK, J.S. PETERS, P.W. HOPKINS

23530-531 PHOTO

23532-23550

WEST SIDE

SPAIN: OUIEDO PROV; LAGO DE LA ERCINA (S. OF COVADONGA

by 8 km.) 1500-1700, S.D. BUSACK, J.S. PETERS 5 AUG 75

CM 60961 23532 = PSAMMODROMUS HISPANICUS ♂ 3.2g

CM 60807(20) 23533 = TRITURUS HELVETICUS (20 larvae @ 0.1g)

23534-41 = USNM 199145-52

23542-50 = CM 60808(9)

23534-550 = T. HELVETICUS

(PART OF SERIES w/ 23601-23617.)

(N=33, $\bar{x}$ WT. = .94g)

23601-23624

SPAIN: OUIEDO PROV; LAGO DE LA ERCINA, W. SIDE

1500-1700, 5 AUGUST 1975, S.D. BUSACK, J.S. PETERS.

23601-8 = USNM 199153-60

23609-17 = CM 60809(9) 23601-617 = TRITURUS HELVETICUS (N=33, $\bar{x}$ WT. = .94g)

CM 60798-60800 23618-620 = T. ^{alpestris} BOSCAI ($\bar{x}$ WT = 2.2g)

USNM 199026-28 23621-623 = ALYTES OBSTETRICANS ($\bar{x}$ WT. = 1.17g)

CM 60902 23624 = LACERTA MONTICOLA (♂, 5.8g) fide E.N. ARNOLD

23625-23671

SPAIN: OUIEDO PROV; LAGO DE LA ERCINA, EAST SIDE.

2000-2300 HRS, 5 AUG 1975, S.D. BUSACK, J.S. PETERS.

23625 = USNM 199060

23628-7 = CM 60849-50 23625-23627 = Bufo bufo ($\bar{x}$ = 28g)

23628-32 = USNM 199161-65

23633-39 = CM 60810-16 23628-23639 = TRITURUS HELVETICUS ($\bar{x}$ = 1.18g)

23640-50 = USNM 199029-39

23652-63 = CM 60824(12) 23640-23663 = ALYTES OBSTETRICANS ($\bar{x}$ = 3.66g)

CM 60823 = [23651 = EGGS]

CM 60868 23664 = RANA ^{TEMPORARIA} IBERICA (0.7g)

23667-70 = USNM 199136-39

23665-66 = CM 60801-02 23665-23670 = T. ^{alpestris} BOSCAI ($\bar{x}$ = 3.22g)

CM 60944 23671 = EGGS

CM
60825 23672

SPAIN: OUIEDO PROV; LAGO DE LA ERCINA - LAGO ENOL,

VIC. MINING CAMP.

6 AUG 1975, S.D. BUSACK.

ALYTES OBSTETRICANS

23673 - 23688

SPAIN: OUIEDO PROV; LAGO DE LA ERCINA, EAST SIDE.

1930-2020 HRS, 6 AUG 1975, S.D.B. & J.S.P.

23673 = LACERTA ^{MONTICOLA} ~~MURATIS~~ (1.1g) file E.M. ARNOLD

USNM 199061 = 23674 = BUFO BUFO (33.0g)

USNM 199140 = 23675 = T. BOSCAI (3.6g)

23676-86 = USNM 199040-50

23687-88 = CM 60826-7 23676-23688 = A. OBSTETRICANS (N=12, $\bar{X}$ = 3.14g)

23689 - 23699

SPAIN: OUIEDO PROV; LAGO DE LA ERCINA, WEST SIDE.

2025-2100 HRS, 6 AUG 1975, S.D.B. & J.S.P.

CM 60828-37 23689 - 23698 = A. OBSTETRICANS (N=10, $\bar{X}$ = 2.95g)

CM 60817 23699 = T. HELVETICUS (1.6g)

23700 - 23711

SPAIN: OUIEDO PROV; LAGO DE LA ERCINA, N. END. MARSHES.

2230-2300, S.D. BUSACK. 6 AUG 1975

23706-10 = USNM 199088-92

23700-705 = CM 60869-74

CM 60818(5)

CM 60875(2)

23700 - 23710 = RANA ^{TEMPORARIA} ~~IBERICA~~ (N=11, $\bar{X}$ = 38.9g)
23711(PART) = TRITURUS HELVETICUS (LARVAE)
23711(PART) = RANA TEMPORARIA (TADPOLES)

23712 - 23721

SPAIN: OUIEDO PROV: 6 KM W. SALAS ON N634. 7 AUG

1617-1718, S.D. BUSACK, J.S. PETERS, T_A = 18.6, T_{H_2O} = 16.6°C.

23712-15 = USNM 199098-101

23716 = MAORIB

23717-20 = CM 60786-89

23712 - 23720 = CHIOGLOSSA LUSITANICA ($\bar{X}$ = .74)

23721 = * SNAIL * EGG MASS (.5g)

23722 - 723

SPAIN: OUIEDO PROV; 6.5 KM W. SALAS ON N634

23722 =
USNM 199102

1728-1829, S.D.B. 7 AUG 75

23723 = CM 60790

CHIOGLOSSA LUSITANICA

PHOTO

23724 - 23734

SPAIN: OUIEDO PROV; AT KM 279 POST ON N634

NEAR CASTAÑEDO. (= 9 km S. PONTIGÓN) 8 AUG 75, SDB + JSP.

23724-27 = USNM 199103-106

23733 = MADRID

23728-32 = 60791-5 (CM)

23734 = CM 60876

23724 - 23733 = CHIOGLOSSA LUSITANICA ($\bar{x}$ = .74 g)

23734 = RANA (?) Temporaria (.2g)

23735 - 23746

SPAIN: LUGO PROV; 3 km W. TUMBO AT RÍO TAMOGA

BRIDGE. 1400-1500 HRS, T_A = 21.5 - 22°C. SDB + JSP, 9 AUG 75

CM 60862

23735 = RANA RIDIBUNDA (22g)

23739-41 = USNM 199072-74

23736-8 = CM 60857-9

23736-23741 = BUFO CALAMITA (5.4-8.5g. See notes)

23742 = MADRID

23742 = B. CALAMITA (PHOTO, 6.7g)

CM 60851

23743 = B. bufo (17g)

CM 60877-8

23744-45 = RANA ~~IBERICA~~ TEMPORARIA

CM 60819

23746 = TRITURUS HELVETICUS (1.6g)

23747

SPAIN: LA CORUÑA; 3 km W. LUGO PROV. BORDER
ON C547 (KM 557) NEAR LEBOREIRO, 10 AUG 1975

1400 HRS, 3.3g., SDBusack

CM 60891

LACERTA BOCAGEI

23748-23752

SPAIN: LUGO PROV; S. SIDE OF VILELA ON N-540.

$T_A = 26^\circ\text{C}$, $T_{H_2O} = 32^\circ\text{C}$, 1520-1620 HRS, 10 AUG 1975.

S.D. BUSACK + J. S. PETERS

CM 60892

23748 = LACERTA BOGAEI (5.8g)

23750 = USNM 199076

23751 = MADRID

23749 = CM 60863

23749-52 = RANA RIDIBUNDA (see notes for weights)

23752 = CM 60864 (11)

CM 60965 23753

SPAIN: PROV. ORENSE; D.O.R. BETWEEN km 1 + 2 ON

C-533, 2 km W. OF LA RUA ¹⁰AUG 75 S.D. BUSACK + J. S. PETERS.

MALPOLON MONSPESSULANUS

23754-56

SPAIN: PROV. LEON; EMBALSE DE PUMARES NEAR RÍO SIL

23754 = CM 60865

AT SALAS DE LA RIBIERA. ON N-120, 2230 HRS., 10 AUG 75

23755 = USNM 199077

23756 = MADRID

S.D. BUSACK + J. S. PETERS

RANA RIDIBUNDA (5.0, 16.0, 26.0g)

23757-23758

SPAIN: LEÓN PROV; 1 km E. CARUCEDO ON N-120, by

natural lake. 11 AUG 1975 JSP + JSP.

CM 60900

23757 = LACERTA LEPIDA (74.0g), (1130HR)

CM 60967

23758 = NATRIX MAURA (85.0g, 1215 HR)

23759 - 23760

23759 = CM 60912

SPAIN: LEON PROV; 1 km W. OF CANDANEDO DE

23760 =

missing
lost(?)

FENAR (NEAR LA ROBLA) [BETWEEN KM 18 + 19 ON C-626]

12 AUG 1975, 1300-1330, $T_A = 24^\circ\text{C}$, POLLUTED STREAM, SDB + JSP.

LACERTA MURALIS (3.2 + 4.0 g)

23761 - 23764

SPAIN: LEON PROV; 1 km W. OF ROBLES DE LA

VALCUEVA [= 1 km W. INTERSECTION C-656 W/ LE-311 ON C-656].

1335-1405, $T_A = 24^\circ\text{C}$, SDB + JSP, 12 AUG 1975

23761-62 = CM 60913-4

23763-64 = USNM 199193-4

LACERTA MURALIS (2.6, 6.1, 6.4, 7.4 g.)

CM 60915 23765

SPAIN: LEON PROV; VEGACERVERA, ON RÍO TORIO

OFF LE-311. 1500-1520, $T_A = 27.5^\circ\text{C}$, 12 AUG 1975,

SDB + J.S.P.

LACERTA MURALIS (6.8 g)

CM 60879(9) 23766(9)

SPAIN: LEON PROV; CUEVA DE VALPORQUERODE

1900-2030, $T_A = 20^\circ\text{C}$, IN STREAM FED POND

S.D. BUSACK + J.S. PETERS, 12 AUG 1975

RANA

(TADPOLES)

CM 60916

23767

SPAIN: LEON PROV; VALPORQUERO (NW OF VEGACERVA)

1030-1200, 13 AUG 1975, SD BUSACK & J. S. PETERS

LACERTA MURALIS (2.5g)

23768-23780

SPAIN: LEON PROV; ON RÍO VALVERON WHERE IT CROSSES
LE-311 (By ROAD: 42 km N. OF LEON, 2 km S. CARMENES, 13 km W.
VALDETEJA). 1230-1400, S.D. BUSACK, 13 AUG 1975

CM 60852
23769-73 = CM 60925-9
23774-78 = USNM 199195-99
23779 = MADRID

23768 = Bufo bufo (77.0g)

23769-779 = LACERTA MURALIS (N = 11 $\bar{X}$ = 4.7g)

CM 60885 23780 = ANGUIS FRAGILIS (18.0g, PHOTO)

[tail broken by idiot]

23781-23782

SPAIN: LEON PROV; 0.5 km S. CAMPO (= 3 km N. OF
CÁRMENES). 1500-1515, CLOUDY, WINDY, UNDER ROCKS
IN GRASSY FIELD. 13 AUG 75

CM 60886 23781 = ANGUIS FRAGILIS (27.0g)

CM 60930 23782 = LACERTA MURALIS (7.0g)

23783

SPAIN: LEÓN PROV; .5 km N. ISOBA IN RÍO DE ISOBA

$T_{H_2O} = 11.4^{\circ}C$, $T_A = 11^{\circ}C$, 0900-0930. S.D. BUSACK, 14 AUG 75

USNM 199062 (130)

CM 60822 (133) = ALYTES CISTERNASII (??)

CM 60883 (3) = ALYTES OBSTETRICANS ^{ADPOCE SERIES} ^{SAB 10/16/2015}

23784 - 23852

SPAIN: LEÓN PROV; .5 km S. ISOBA AT LAGO DE ISOBA

1100-1300, RAINING. S.D. BUSACK + J.S. PETERS. 14 AUG 75

23784 (19) = CM 60860 (19)

23785-94 = CM 60866 (10)

23795-804 = USNM 199078-87

23805-6 = MADRID

23784 (19) = HYLA ARBOREA (@ 0.3g)

23785-23806 = RANA RIDIBUNDA (N=19 $\bar{x}$ = 2.04g,

♂ at 17, 20, and 14.5g)

23813-20 = CM 60838-45

23821-26 = USNM 199051-56

23807-12 = MADRID

23807-23826 = ALYTES OBSTETRICANS (N=19, $\bar{x}$ = 1.02; 1 adult @ 6.4g)

23828-29 = USNM 199093-4

23827(5) = CM 60880(5) ~~ETA~~

23827(5)-23829 = RANA ^{TEMPORARIA} ~~IBERICA~~ (N=5 @ .4g, 21.0 and 10.0g

FOR ADULTS)

23830 = CM 60931

23831 = USNM 199200

23832 = MADRID

23830-23832 = LACERTA MURALIS (N=3, $\bar{x}$ = 5.13g)

23834-37 = CM 60853

23838-41 = CM 60803-60806

23838-41 = USNM 199141-44

23842-45 = MADRID

23833 = BUFO BUFO (26.0g)

23834-23845 = TRITURUS BOSCAI (N=12, $\bar{x}$ = 2.35g)

23847-48 = USNM 199166-67

23846 = MADRID

23849-50 = CM 60820 (10)

23851 = USNM 199209

23852 = CM 60945

23846-23850(9) = T. HELVETICUS (N=3, $\bar{x}$ = 1.33g; N=10, $\bar{x}$ = .3g)

23851-23852 = PSAMMODROMUS ALGIRUS (.2 + .4g)

23852 = ZOOTOCA VIVIPARA ^{SAB 1/2016}

23853-23930

SPAIN: LEÓN PROV; 7 km S. OSEJA DE SAJAMBRE (C-637) TO
13 km S. OSEJA DE SAJAMBRE + 5 km. S. P^{to} PANDERRUEDA
TO P^{to} PANDERRUEDA. (ALL A.D.R.)

2155-2400 HRS, $T_A = 16.0 - 10.2^\circ\text{C}$, $T_{\text{ROAD}} = 12.4 - 15.2^\circ\text{C}$, $\left[\begin{array}{l} \text{S. SALAMANDRA} \\ T_B = 13.3 - 16.0^\circ\text{C} \end{array} \right]$

14 AUG 1975, S.D. BUSACK + J.S. PETERS

23853-82 = CM 60797(31)

23883-911 = USNM 199107-35

4

23914-21 = CM 60854(5) CM 60821

23922-30 = USNM 199063-71

23913 = MADRID

23853-23911 = SALAMANDRA SALAMANDRA (N=63, $\bar{X} = 12.29\text{g}$)

23912 = TRITURUS HELVETICUS (2.0g)

23913-23930 = Bufo bufo (N=18, $\bar{X} = 46.7\text{g}$)

BERNARDEZI

FASTUOSA

23931-23939

SPAIN: LEÓN PROV; OSEJA DE SAJAMBRE AT CAPITA SAN ROQUE

1600-1800, 15 AUG 1975, S.D. BUSACK + J.S. PETERS.

23931-33 = CM 60932-4

23934-6 = USNM 199201-03

23937 = MADRID

23931-23937 = LACERTA MURALIS (N=7, $\bar{X} = 3.68$)

CM 60887

23938 = ANGUIS FRAGILIS (12.5g)

CM 60962

23939 = CORONELLA AUSTRALICA (43.5g)

23940-23942

SPAIN: LEÓN PROV; OSEJA DE SAJAMBRE, 11 km S. AT
FUENTE DEL INFIERNO. (RÍO SELA) 1330-1530,

23940 = CM 60935

23941 = USNM 199204

S.D. BUSACK. 15 AUG 1975

23940-23941 = LACERTA MURALIS ($\bar{X} = 5.4\text{g}$, 4.4+6.4g)

CM 60855

23942 = Bufo bufo (58g).

23943 - 23945

SPAIN: OVIEDO PROV.; LLANES, EL BRAO *comprovement*

16 AUG 1975, S.D.B. + J.S.P.

23943 = MADRID

23944 = USNM 199205

23945 = CM 60936

LACERTA MURALIS ($N=3$; $\bar{x} = 3.47g$)

23946

SPAIN: OVIEDO PROV.; LAS AREÑAS DE CABRALES

17 AUG 1975, S.D. BUSACK

CM 60890

CHALCIDES CHALCIDES (12.5g)

23947 - 23948

SPAIN: OVIEDO PROV.; 5 km E. LAS AREÑAS AT RÍO CARES.

18 AUG 75, S.D.B. + J.S.P. + PETER W. HOPKINS, 1000-1200 HRS, $T_A = 18^\circ C$.

23947 = USNM 199206

23948 = CM 60937

LACERTA MURALIS ($N=2$, $\bar{x} = 3.55g$)

WPCN 1955

23949

SPAIN: LEÓN PROV.; 7 km S. OSETA DE SASAMBRE.

2155-2400 HRS.

S.D.B. + J.S.P.

14 AUG 1975. (PRESERVED 18 AUG 75)

Returned to Spain, at Madrid

SALAMANDRA SALAMANDRA (5.2g)
FASTUOSA

23950

SPAIN: SANTANDER PROV; 10 Km N OF OJEDO BETWEEN
Km. 420 + 421, D.O.R. ON N-612. 1538 HRS.
18 AUG 1975. S.D. BUSACK + J.S. PETERS.

CM 60969

NATRIX NATRIX

23951 - 23952

SPAIN: AVILA PROV; S. BARTOLOMÉ DE BÉJAR (BRIDGE
AT km 13. ON C-500)

1230 HRS, S.D. BUSACK, 20 AUG 1975

23951 = CM 60938
23952 = USNM 199207

LACERTA SCHREIBERI (♂♂, 12 + 15g)

23953

SPAIN: AVILA PROV; BECEDAS

20 AUG 1975, 1244, $T_A = 33.5^\circ\text{C}$, ON BRIDGE IN TOWN.

S.D.B. + J.S.P. 20 AUG 1975

CM 60893

LACERTA HISPANICA (3.8g)

23954 - 23956

SPAIN: AVILA PROV; 1 km W. PALACIOS DE BECEDAS

1250 - 1310, S.D. BUSACK, 20 AUG 1975

CM 60901 23954 = LACERTA LEPIDA ($T_B = 36.8$, 24.0g)

CM 60939 955 = L. SCHREIBERI ($T_B = 33^\circ\text{C}$, ♀, 12.0g)

CM 60894 956 = L. HISPANICA (2.8g, ♂)

23957

SPAIN: AVILA PROV; 3 km NW ~~A~~ EL

BARCO DE AVILA BETWEEN km 26+27 ON

C-500. D.O.R., 1335 HRS. 20 AUG 1975

S.D. BUSACK

CM 60963

ELAPHE SCALARIS

23958

SPAIN: AVILA PROV; 5 km SW EL BARCO DE

AVILA + 1 km NW CANALEJA ON N-110 (BRIDGE)

1405 HRS, 20 AUG 1975, S.D. BUSACK.

CM 60895

LACERTA HISPANICA (3.8 g)

23959

SPAIN: AVILA PROV; 4 km W. LA ANGOSTURA

BETWEEN km 13+14 ON C-500.

1700 HRS, 20 AUG 1975, S.D. BUSACK.

CM 60940

LACERTA SCHREIBERI (16.0 g)

23960

SPAIN: AVILA PROV; SAN MARTÍN DE PIMPOLLAR

1900 HRS, S.D. BUSACK, 20 AUG 1975

CM 60941

L. SCHREIBERI

(48.0g) [PHOTO]

23961 - 23982

SPAIN: AVILA PROV; SAN MARTÍN DE PIMPOLLAR

0830-1233 HRS, S.D. BUSACK, 21 AUG 1975

23961-69 = CM 60896(9)

23970-78 = USNM 199168-76

23979 = MADRID

23980 = MADRID

23981 = CM 60942

23982 = USNM 199208

23961-23979 = L. HISPANICA

($T_A \bar{x} = 25.6^\circ\text{C}$, $\bar{x}T_b = 34.0^\circ\text{C}$,
 $3.9\text{g} = \bar{x}$ $N=19$)

23980-23982 = L. SCHREIBERI

($\bar{x}T_A = 29.0^\circ\text{C}$, $\bar{x}T_b = 37.2^\circ\text{C}$,
 $N=3$, $\bar{x} = 38.3\text{g}$)

23983

SPAIN: ÁVILA PROV; SAN MARTÍN DE PIMPOLLAR

21 AUG 75, 1904 HRS, $T_A = 28.0^\circ\text{C}$, $T_b = 32.8^\circ\text{C}$.

S.D.B.

CM 60888

CHALCIDES

~~DEDRAGAI~~
CHALCIDES

(6.4g)

23984

SPAIN: ÁVILA PROV; SAN MARTÍN DE

PIMPOLLAR. 21 AUG 75, 2230, S.D.B. + J.S.P.

CM 60867

RANA RIDIBUNDA

(86g)

23985-2399⁷₆

SPAIN: MADRID; MANZANARES EL REAL

1000-1200 HRS, S.D. BUSACK + J.S. PETERS.

24 AUG 1975.

23985-89 = CM 60946-50
23990-94 = USNM 199210**
23995-6 = MADRID

23985-23996 = PSAMMODROMUS ALGIRUS *

CM 60884 23997 = ACANTHODACTYLUS ERYTHRURUS (5.9g, $T_b = 34.4$,
 $T_A = 24.0^\circ\text{C}$, 1110.)

* $N=12$, $\bar{x}T_b = 35.5$, $\bar{x}T_A = 22.4$, $\bar{x}WT = 7.7$

** 199210, imm. ♂; 199211 MAT. ♀ - EARLY VITELLOG. FOLLICLES; 199212 MAT. ♂; 199213 imm ♀, 199214 ♂ imm. 2nd
19 JUN '04

23998

SPAIN: ÁVILA; 8 km ENE ARENAS DE SAN PEDRO

(D.O.R. ON C-501 BETWEEN km 116 + 117), 1983,

S.D.B. + J.S.P. 24 AUG 75.

CM 60966

MALPOLON MONSPESSULANUS



23999-²⁴⁴¹⁵~~24015~~

SPAIN: ÁVILA PROV; GUISANDO (LOS GALAYOS)

25 AUG 75, S.D.B. + J.S.P., 1025-1230 HRS.

23999 = CM 60897
24000 = USNM 199177
24401-08 = CM 60951-58
24409-15 = USNM 199215-21

23999-24000 = LACERTA HISPANICA (12.4 + 0.4g)

²⁴⁴⁰¹⁻²⁴⁴¹⁵
~~23999-24000~~ = PSAMMODROMUS ALGIRUS (N=15, $\bar{x}T_b = 35.2$,

$\bar{x}T_A = 25.0^\circ\text{C}$, $\bar{x}WT = 7.7$)

NHD. 223222
W 5.152051

895 m

883 13 DEC 2015

24416
~~24016~~

SPAIN: ÁVILA PROV; GUI SANDO.

25 AUG 1975, COLL. UNKNOWN, SDB PREP.

CM 60889

BEDRIAGAI
CHALCIDES CHALCIDES (.55g)

24417
~~24017~~

SPAIN: ÁVILA PROV; GUI SANDO, RÍO PELAYO

25 AUG 1975, 2100, S.D.B.

USNM 199222

NATRIX MAURA (24g)

24418
~~24018~~

N 40.23404
W 5.16207,
1105 M

SPAIN: ÁVILA PROV; 4 km NE GUI SANDO. (BY ROAD)

26 AUG 1975, 1045 HRS, $T_B = 36.8$, $T_A = 23.0$, 5.4g.

S.D.B. LA CABRA (SEE SLIDE)

CM 60959

PSAMMODROMUS ALGIRUS

24419
~~24019~~

SPAIN: ÁVILA PROV; 5 km N. EL HORNILLO.

1200-1245 HRS, 1.3g, S.D. BUSACK, 26 AUG 75

CM 60943

L. SCHREIBERI

24420
24020

SPAIN: ÁVILA PROV; 2 km from MONTE^{#11} (DOMINGO FERNANDO)
AN ICONA SITE (CA. EL HORNILLO)
26 AUG 75, .5 g, 1310 HRS, S.D. BUSACK.

CM 60898 LACERTA HISPANICA

24421
24021

SPAIN: ÁVILA PROV; AT MONTE^{#11} (DOMINGO FERNANDO), AN ICONA SITE near EL HORNILLO.
26 AUG 1975, 1317 HRS, D.O.R., S.D. BUSACK

CM 60964 ELAPHE SCALARIS

24422 CARRETARA DE MOMBELTRÁN
24022 N40.24862 W5.07889 80B 1/2016

SPAIN. ÁVILA PROV; 4 km N. EL ARENAL
26 AUG 1975, 1507 HRS, 5.6 g, $T_B = 37.4$, $T_A = 33.4^\circ\text{C}$

CM 60960 PSAMMODROMUS ALGIRUS

24423-24427
~~24023-24027~~

SPAIN: ÁVILA PROV.; VIC. GUISANDO.
26 AUG 1975, collected by locals

24423 = CM 60899

24424 = USNM 199178

24425 = CM 60861

24426 = MADRID

24427 = 60968 (CM)

⁴
24023-4 = L. HISPANICA (.6 + 1.0 g)
⁴
24025 = R. IBERICA (3.0 g)
⁴
24026 = P. ALGIRUS (.6 g)
⁴
24027 = N. MAURA (29.5 g)

24428-24429

SPAIN: ÁVILA PROV; VIC. GUI SANDO CAMPGROUND

26 AUG 1975, LOCAL CHILDREN (=JOSÉ LUÍS SOTO GARCIA)

24428 AT MADRID ^{15 JAN 1976} 24428 = LACERTA HISPANICA

USNM 199075 24429 = RANA IBERICA

24430-24450

SPAIN: ÁVILA PROV; LAGUNA GRANDE (SIERRA DE GREDOS), 13 km S. Hoyos del Espino, 1125-1753 HRS.

24430-36 = CM 60904-10 (27 AUG 1975, S.D. BUSACK + J.S. PETERS
24437-43 = USNM 199179-85)

24430-24443 = LACERTA MONTICOLA ($\bar{X}_S \approx N=14$,

$T_A = 18.7$, $T_b = 31.8$, $WT = 5.7g$, 1ST 2 OF
SERIES PHOTOGRAPHED)

CM 60796 24444 = SALAMANDRA S. BEJARAE (= ALMANZORIS??)

[10.5g, 1452 HRS, N. SIDE OF LAKE,

UNDER ROCK NOT IN CONTACT W/ SOIL]

24447-9 = USNM 199095-97

24425-46 =

CM 60881-2.

24445-24449 = RANA TEMPORARIA (N. SIDE OF LAKE)

24450 = Larval series ($T_{H_2O} = 19^{\circ}C$, 1425 HRS)
Bufo bufo

NOTE:
24444 = CM 60796
IS A TOPOTYPE
OF S.S. ALMANZORIS
TYPE LOCALITY: LAGUNA
GRANDE DE GREDOS.
MÜLLER + HELLMICH, 1935.

END
1975

NO FIELD TAG CM 60999 = SALAMANDRA SALAMANDRA

AVILÁ; GUI SANDO AREA, AUG 1975

Collected and preserved by locals.