



SOKKIA™

**FIELD
BOOK**

No. 8152-80

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98-041

A2: Cochise Co., Chiricahua

Mt., Hens. Martyn Campground,

Elev. ~ 6000' 18-19 July, 1998

- collected adult ♂ Metacypus, Spis

in oak woodland - ♀♀ Hesperomys

on dense oak litter - searched

for ♂♂'s, none seen.

98-042

CA: Siskiyou Co., Mt. Skasta,

Hwy A10, Red Fir Flat, 1-8

mi. below Bunny Flat Elev. ~ 6400 ft

9 August, 1998 - collected 2 ♂

Hesperomys on sticks in open,

rather "barren" pine litter w/

low manzanita - little herbaceous

material.

98-043

CA: Siskiyou Co., Mt. Skasta,

Hwy A10, Bunny Flat tail her.

Elev. 6880 ft. 9 August, 1998

- collecting in shallow "fell field" -

rocky ash substrate, herbs + low

manzanita. Collected ♂♀ Hesperomys

on rocks; Mixture of "Hesperomys" / Hesperomys

♂, some ♀♀'s - some ♂♂'s w/

"intermediate" phenotypes.

98-043

Distribution of ♂ phenotypes:

1) dark 1st femur, dark free, triangular clypeal indensense,

pale chelitrize w/ bundled hairs, yellow-white pelpi

(3 of 5 ♂♂'s)

2) femur 1 w/ entire yellow band, basal white patches,

lighter free - clypeus ~ square box, pale frings

w/ bundled hairs, red pelpi (1 of 5 ♂♂'s)

3) - like 2, but w/ yellow-orange pelpi, low

slipping on leg 1

98-044

CA: Siskiyou Co., Klamath River Road

(Hwy 99), Beaver Creek, 0.3 mi N mouth

@ Klamath Elev. ~ 6000 meters 10 August, 1998

- resting on streamside vegetation, some

beaks / pines further from H₂O.

Found pale ♂♀ Phanias, ♂♀ Spis,

Marchena, ♂♀ Metaphidippus utis.

98-045

CA: Siskiyou Co., vic. West Boulder Lake,

Trinity Alps Wilderness, S. of Callahan

Elevs. ~ 5000 - 7000' 11-13 August, 1998

- collected ♂ Hesperomys in more open, "sticky"

areas along trail - away from herbaceous

areas preferred by Hesperomys group. Also

collected Hesperomys Kestoni amongst boulders

98-045

in large granite boulder-field just N of lake, below ridge. Spiders abundant in lampshade webs - collected 4 large sub-adults - no obvious darker adults seen.

- Habronattus americanus group:
1 ♂ collected lakeside - w/ ventral white band on forehead, entire clypeal band w/ dark iridescence, expanded tarsi, dark chelicerae, weak, dark palpal covering
1 ♂ collected on lower trail (e Middle Boulder Creek crossing) - like "Kubzi" - slight crest, shallow clypeal band, "Kubzi" chelated covering, pale white palpi, femur 1 w/ white hairs - fringe, expanded tarsi (see type like specimens)

- multiple ♂♂ collected on slope, field NE (below) lake or "standard" americanus but w/ expanded tarsi, full elytra - but less iridescence, pal palpi, tarsi, 1st femur w/ fringe.

- multiple taxa involved in hybridization? (including N Kubzi, americanus, bulbipes).

41.35543 -122.20418

98-046

CA: Siskiyou Co., Mt. Shasta Hwy A10, picnic area/lot 0.8 mi. above Panther Meadows Rec Area, 2.5 mi. above Bunny Flat Elev. ~7500' 14 August, 1998

98-046

More Hemidius collected on rocks, open herbaceous habitat w/ low-growing manzanita. Hemidius / Kubzi hybrids (?) w/ following phenotypes:
1) see 98-043 ♂♂ 2 (americanus) 4/6 ♂♂s, vary in cheliceral hair color from white → pale yellow
2) 2/6 like 98-043 ♂♂ - dark, ~"Kubzi"
3) 1/6 ~ standard americanus - most obvious feature being clean full iridescent clypeus w/ white band above (see McCord River specimens).

→ Collecting "yellow-legged" form of H. transvillius - form actually corresponds to type, although more widespread brown transvillius is now recognized as "H. transvillius". Yellow legs are apparent specialist on creosote - has only been found in association w/ this plant.
31 August, 1998 - trip west to vic Yuma, AZ.
Collected imm ♂, ♀, & near Mohawk, just off of I-8. 2♀♀, C I-8 rest-stop E of Yuma, 2 ♂, several ♀♀s @ vic. "Midway Well", w/ of Algodones dunes - pure creosote flats. Individuals not uncommon - simply need to spend time beating many bushes.

98-047

AZ: Graham Co., Pinaleno Mts.,
Tripp Canyon, Elev. ~5000' 2 September,
1998. Coll. MCH, M. Kaplan
- collected ♂♀ Helophorus in oak litter
w/ grass on flats near stream - Also
saw Haregenensis on flats, slopes.
MK collected ♂ Phidippus below oak
tree 32.77896 -110.05831

98-048

AZ: Pima Co., Tucson
1-3 September, 1998
- ♂♀ Hellgramites collected in
leaf litter.
♀ Philodromidae in house

98-049

AZ: Santa Cruz Co., Santa Rita Mts.,
Agua Caliente Canyon Elev. ~4000'
19 September, 1998
- adult ♂ Phidippus carinus in riparian
vegetation; mother seen on Sotol.

98-050

NM: Otero Co., White Sands NM,
Bullock's Camping Area Elev. ~4000'
10-11 October, 1998 Coll. MCH
- arrived c site in early evening - June
area characterized by "transverse" dunes, w/
ridges of sand in parallel, separated
by low areas of sand/hardpan w/
sparse vegetation, including dominant

98-050

= White Sands - yucca,
various animals (eg. Urocyon, Lepus).
Started looking for Hesperomys c ~ 5pm
Found first ♀ almost instantly by pulling -
back low-growing Chryso, searching
sand underneath. Found adult ♂
in similar manner - under c to
whether zeta of pulling-back plant
is knocking spiders from vegetation -
Continued working Chryso, started
to gently "beat" branches before
searching underneath - found many ♂♀ !!!
- looking for lycosids c night - found
pale medium-sized species in vegetated
flats - no obvious burrow associations,
Also found large Geophila (black) in
association w/ burrows - some far from
vegetation. Awoke early in A.M. -
somewhat chilly. Again, started looking
under Chryso, beating branches before
looking. Seems clear that spiders
are in vegetation - "beat" several individuals
that were cold, motionless, laying on
sand after beating - could not have
been like that if just "out" overnight.
Finished w/ 9 adult ♂/4 ♀ - very
successful.

[98-050]

Also found 3' 4' Philippines
in nests in Chrys - collected pair -
* scouted other *Hustulatus* sites
w/out success. Recorded from
Jornada Exp. Range N of Las Cruces -
habitat marginal - no spiders found.
Searched for ~ 2 hours in good
early morning time in large wash
crossing Roadrunner Parkway off Hwy 70.
Int. Hwy 70 11:25, but no spiders -
habitat good, but too early - worth
perhaps still to in future.

[98-051]

Baja California NOITE: ~ 2-4 km E
of Carricitos, vic. mouth of El Berrudo
Canyon, South end of Sierra San Pedro
Martia, ~ 12 km S of Agua Caliente
Elevation ~ 600 meters 24 October, 1998
- arrived a site SW of San Felipe, in large
reinscribed valley on east side of Sierra
San Pedro Martia - dry desert habitat w/
Cotton, Ocotillo, jumping cholla, palo verde,
iron wood, creosote, *Ambrosia* - granitic
soils @ flanks of small hills, in
relatively stabilized collecting in
am. - weather warm, perhaps 80°F

[98-051]

Searched small pebbles associated
w/ small washes - nothing seen. Started
searching vegetation - good luck on a
small, dominant *Ambrosia* - very dry.
Either kicking or hand-beating branches
near ground, looking underneath after
pulling branches back. Found 24, 30
Hsigatus in relatively short time spent -
seemingly common. Spiders of Mohawk
dunes *sigatus* - speckled 8's, 8's w/
abdominal lateral bands. Diagnostic first
female w/ black, flattened spiracles.
[98-052] BCN: El Berrudo Canyon, S end
of Sierra San Pedro Martia, elev. ~ 900
meters 24-25 October, 1998. Collecting
on day-hike up canyon - canyon walls steep,
dominated by granite rock, dry vegetation -
canyon bottom w/ small perennial stream -
vegetation including Mexican blue palm, *Selix*,
Ambrosia - Collected many 8's, 1 pair, 23 8's
on small rocks associated w/ sand bar
of stream. No vegetation present - spiders
fully terrestrial → spiders or *Hustulatus*,
but w/ white-red/brown first female - no
thoracic or abdominal markings - related to
other Baja *Hustulatus*? Collected in mid-
afternoon on both days, perhaps 80°F.

98-052 Searched in other areas, including on Hymenoclea in the canyon wash below ~ 700 meters, but above 98-051 site - Hemijunctus only. Also re-searched on rocks @ low site - very nice habitat - no spiders seen (lack of sympatry??)

98-053 CA: San Diego Co., Cuyamaca Mtns., Cuyamaca Rancho SP N 32° 53.778' W 116° 34.736' 1080 meters 22 Nov. 1998 - collecting in Adenostoma, Arctostaphylos + small Quercus habitat - shallow hills w/ "barren" ground, washes - 211 w/ small granitic pebbles - collected several imm ♀, 2p♂ Hysterozetes vitiing on pebbles - many along walking trails, slightly disturbed.

98-054 CA: San Diego Co., 0.5 mi. up (w) Lost Valley Track trail off Hwy 79, vic. Warner Springs N 33° 17.527' W 116° 39.565' Elev. 949 m 11-22-98

Again, habitat dominated by Adenostema (= chaparral habitat) - low hills w/ "barren" ground beneath tall scrubs. Collecting along "ridgetop" - crest of small hill - open and rocky. Collected 2 p♂, imm ♀ Hysterozetes on small rocks.

98-055 CA: San Diego Co., Hwy 522, E. Ranchita, cf. trailhead Culp Valley Trail N 33° 12.837' W 116° 23.468' Elev. 1132 m 11-23-98 - in "desert chaparral" on east side of mountain crest heading down into low Colorado desert. Collecting along sandy wash - small gravel / pebbles along sides. 2p♂, several imm ♀ Hysterozetes on pebbles. Although immature - appear to be different form than coastal chaparral pops to the west??

98-056 CA: San Diego Co., 0.8 mi. N Hwy 522, vic. Ranchita, N 33° 13.335' W 116° 29.952' Elev. 1307 m 11-23-98 Just above crestline, should be in same pop @ 98-054, perhaps contiguous? Collecting in collecting area of several washes - hardpan soils w/ small rocks. 2p♂, several imm ♀ Hysterozetes collected.

98-057 CA: San Diego Co., Mt. Kono-Rah Co. Park Exit, I-8 N 32° 39.154' W 116° 06.098' Elev. 964 m 11-23-98 ~ desert chaparral near crestline - drainage towards E. Collecting in sandy wash w/ granitic pebbles - edges w/ small pebble buildup - collected many imm ♂♂, 1st ♀ Hysterozetes - new form!! Black; tan (length 26), venter 1st femora.

[98-058] CA: Imperial Co., 1.0 mi N Hwy 52 on Skull Gym. Rd, cf. Ocotillo N 32° 45.807 W 116° 00.231' Elev. 135 m 23 Nov. 1998 - sandy washout flat w/ Ambrosia, Hyssopus, Psoralea, Ocotillo, Larrea - dominated by Psoralea. Using "hand-beating" technique collected 1 adult, 1 p ♂ Hsiazetis from Ambrosia.

[98-059] AZ: La Paz Co., 0.8 mi. N Hwy 60, 7.0 mi. W Glendon, N Side Higuahua Mtns, N 33° 51.160' W 113° 24.595' Elev. 644 m 24 Nov. 1998 - lower bajada of Sonoran desert - mostly creosote, various legume trees in washes, saguaro highest. Fine sand / silt flats and wash - small pebbles - Collected 2 ♀ / ♂ adult Hustulatus - "Copper / gold" form of Maricopas, Watermans, Pinarate, etc. - fairly large for this form.

* Other sites checked:

CA: San Diego Co., Hwy 52, AB Desert SP, "Box Canyon" Area - low desert wash - habitat good, no vultures?
CA: SD Co., Hwy 52, ABSP, cf Vallecito Co., Park, very low desert - silty flat w/ pebbles - no vultures?
- [98-058] vigneris hrb - no vultures on rocks?
CA: Riverside Co., S side Big Moris Mtns., off Midland Rd. low desert wash - Hyman + Ambrosia beken - no vultures

AZ: Yavapai Co., Hwy 89, NE Congress on road to Piedmont - good "upland" vultures habitat - none seen. ; up (39) cf. Desert View, rocky wash - no vultures?
AZ: Maricopa Co., Hwy 74, S side Hieroglyphic Mtns - large desert wash - habitat marginal - no vultures??

[98-060] AZ: Pima Co., Tucson Mtn. Park, Buenos Mtn. Picnic Area, Elev. ~3000' 26 Dec. 1998 - Hustulatus ♂ collected on small rock in silty / sand flat adjacent to wash. Form like then from E side of Tucson Mtns. (= white femur I) * 2 ♂ / ♀ collected 12-31-98 on rocks in wash / upland

[98-061] AZ: Pima Co., Buenos Aires NWR, 0.6 mi. W Hwy 286, Bailey Wash Elev. ~3500' 29 December, 1998 - collecting in English wash, "gravel" accumulation on edge - probably not inundated. Collected ♂ adult ♂ Hustulatus on small rocks - white femur I form - fairly dark skulls on both dorsal carapace & abdomen - Expected black femur W of Allen Wash - surprised!! Surrounding is mesquite grassland uplands - mostly too vegetated for vultures

98-062 AZ: Pima Co., Altar Valley, 9.4 mi. SW Robles Junction on Hwy 286, near Altar Wash Elev. ~3300' 29 Dec, 98 - collecting just W of (286), perhaps 1/4 mi. E of Altar wash. Habitat gently sloping creosote / cholla / yucca / mesquite - fairly barren ground level w/ small rocks - sandy / silty substrate. Collected several ♀ / 2♂ adult *Hustulatus* on rocks. Aztec, surprised to find black female I form, here E of Altar wash!

98-063 AZ: Pima Co., Owl Head Ranch Rd., ~1/4 mi. W Owl Head Buttes Elev. ~3000' 30 Dec, 1998 - 4 adult ♂ black female I *Hustulatus* collected on small rocks on old track along higher "ridge" (~10 ft above wash) - silty soil w/ drainage - None found in wash proper.

98-064 AZ: Pima Co., Freeman Rd., 0.6 mi. W jct. w/ Hayden Ranch Rd., vic. Tortilla Mtns. Elev. ~4000' 30 Dec, 1998 - patch of juniper woodland w/ gently-sloping rotten granitic "barrens" - little / no ground vegetation 1 adult ♂ *Hustulatus* black female form - fairly large individual seen this form - related to higher elevation ??

98-065 AZ: Pima Co., Freeman Rd., 4.2 mi. W jct. w/ Camino Rd. @ Dudleyville, vic. Dodsons Wash Elev. ~3200' 30 Dec, 98 - gently-sloping granitic soils - open & gravelly - dead, vegetation w/ hackberry, mesquite / palo verde / cholla - 1 ♂ / 2 ♀ *Hustulatus* black female on small rotten granite - ♂ very dark - almost shiny black.

98-066 AZ: Pima Co., River Rd. @ Copper Creek, ~4.0 mi. SE Mammoth Elev. ~2200' 30 December, 1998 - 5 ♀ / 1 ♂ *Hustulatus* white female form collected on gravel rocks - either edge of large wash, or just above wash level in adjacent creosote flats - elevation lower than nearby black female forms. ♂ dark, of Pine Creek E of Pinalons.

99-001 NM: Dona Ana Co., Las Cruces, Roadrunner Parkway, cf. jct. Hwy 70 / I-25, large wash just S of Hwy 70, E of Middle School - collecting on shallow slopes E wash edge, mostly *Larrea* and mesquite, very sandy soils, small rocks. 9 February, 1999, Elev. - collected 4 ♀, 2 ♂ on small rocks - looks very similar to *Hemilys*? from white Sands (less extreme), but also cf. *Hustulatus* from Willcox Playa, AZ. Tried hand-baiting small comp (of white Sands) - nothing!

99-002 NM: Hidalgo Co., ~0.5 mi. NE
Steins in Rd. (A12) 9 February, 1999

- collecting along gravelly wash in creosote flats, small rock accumulation @ wash edges. 4 ♀, 1 ♂
Hustulatus - white-femured form

99-003 CA: San Diego Co., Tijuana Slough NWR, cf. Imperial Beach

7 March, 1999 Elev. sea level
collecting in sand dune herbs adjacent to slough w/ cordgrass
Collected Hustulatus in more open herbs w/ some vegetation
Hschlingia on grass/debris closer to H₂O; Helegans on top of dune vegetation. No sign of Hustulatus, reported 1 north of Silver Strand - Dunes far from pristine - might need richer situation

99-004 CA: San Diego Co., E Side of Pine Valley, "below" Sunrise Hwy to Mt. Laguna, 10 March, 1999 Elev. ca. 4000'
-collected Hustulatus on rocky flat of chamise chaparral. Unique "form" in having "spiked" fringe on dorsal surface of PI, TI - perhaps inflated, somewhat shiny; In-Ko-Pah like scales on top of head; unique strip on telio/basisabars

99-005 CA: Imperial Co., Chick Road @ Hwy 11, ~5 mi. E of Centrao 10 March, 1999
Elev. ~ sea level - collecting @ roadside in short grass habitat, fairly hammered; ag all round. Collected 2 ♀ Hustulatus, 1 p ♂ Hfermosus; 1 Hymenitrix (?).

99-006 CA: San Diego Co., E side Pine Valley - same site @ 99-004. 20 March, 99'
-collecting in same habitat, but earlier in AM. Found both ♀♀'s and ♂♂'s in habitat

99-007 CA: Imperial Co., ~1/2 mi S Hwy 52 near powerlines, ~5 mi. W Ocotillo Elev. ~135 m 20 March, 99' - 1 ♀ Hymenitrix found - collected from Hymenocler

99-008 CA: San Diego Co., near Cowles Mtn, in "San Carlos" @ just golfcrest/Navajo. 20-21 March, 99' - collected 2 ♂ Hustulatus in hillside - Rhys Litter. p ♂ Hhellini in house Elev. 700'

99-009 CA: San Diego Co., Mission Trails Regional Park, Interpretive Center - trail to San Diego River. 21 March, 1999'
- collected adult ♂ Hymenitrix in grass along river Elev. 400'

MCH 99-010

Mzdata Canyon

Santa Cruz 5000'

MCH 99-011

Gardner Canyon

Santa Cruz > 5500'

MCH 99-012 NC: Yancey Co., Mt. Mitchell State

Park, Black Mountains 4 May, 1999
- collecting w/ Bob Dellinger, USFWS project
on rare nestlings. Collecting in vicinity of
type locality of N. crosbyi. → long ridge
which extends ~ N of Mt. Mitchell parking lot.
Collecting primarily on NW-facing side of
ridge, in spruce-fir habitats w/ boulders,
deep litter/moss. Found fair #'s of
spiders, in 6 Δ placed along ridge. ^{Potato}
Numbers include 1 adult web seen / 1 imm in ^{5: Hill} (4) Cattail Peak
web on rock outcrop area S of Mt. Craig (41); ^{6:}
34, 5 imm under rocks below N side of Mt. ^{3 Balsam}
Craig (#2); 5 adults (2♂, 3♀), 2 imm under/ near; ^{one}
rock crevice on NE side cattail peak (#4); ¹⁰ 2 Mt. Craig
1 ♀ 1.1 imm under rocks on S side Potato
Hill (#5); 5 ♀, 1 ♂, 2 imm under rocks
below lower parking lot @ summit (#7). ⁷
No spiders found in Balsam cone area (#3). ^{11: Mitchell}

MCH 99-013 NC: Buncombe Co., 0.1 mi NW (by road)
of Hickory Nut Gap, Hwy 44 5 May, 1999
Elev. ~ 2880' - nice N-facing talus cone just
above highway. Collected 1 ♂ ^(catkins) Nestlars / 5 imm
4 juv, all under rocks, either near large overhang
with steep, or in deep talus nec. No ♀s -
perhaps deeper ?? Also collected 2 imm ^{population}

Hypocichus, assumed to be Hoagleri.

probably ^{new}

MCH 99-014

NC: Rutherford Co., Chimney

Rock Park, above Chimney Rock (the town).

Slw. ~ 2300' 5 May, 1999 - viz park

naturalist (Cliff Colwell) gained access to

"Moonshiner's Cave", a crevice cave w/

artificial waterfall + lights. Fairly large - perhaps

total darkness situation - good N. bimaculatus (?)

habitat. Found 12 ♀ / 2 ♂ / 2 immatures in

short 20 minute collection - obvious large

population - probably throughout Hickory

Nut Gorge (includes BAT CAVE).

MCH 99-015 NC: Rutherford Co., Round Top

Mtn, just N Chimney Rock Slw ~ 2500'

5 May, 1999 - collecting / survey just

above town, below S-facing bluffs of

Round Top Mtn. lots of good Nestus

habitat, but very difficult to access - difficult

to find entrances into crevice caves. Collected

1 ♀ N. bimaculatus in deep hole under large

boulder / saw 1 other ♀. Population almost

certainly large size habitat availability - fairly

rich, not obviously impacted. Also collected

♂ / ♀ Heterocentrus in leaf litter / 15'

Mosses on stick on road edge w/

leaf litter. Dark ♂ w/ yellow head - not

dark in color, other described as

undescribed thing ??

(N. bimaculatus also taken)

MCH 99-016

NC: Polk Co., backside of

Chunky Gap Mtn., Chestnut Branch

of Barnard's Creek, FR road #

Slw. 6 May, 1999 - Searching for

undescribed Nestus, first collected by

Bob Dellinger @ Barnard's creek, just

W of forest service road on south side

of creek. Searched ~ 2 hours in this

vicinity, found no Nestus - habitat decent,

spiders expected. Also collected in

small boulder field just S of FR

road @ Chestnut Branch crossing - Managed

to find 1 ♂ / 4 ♀ (first specimens collected)

under rocks in this area. Spiders

certainly not common. Found 1 other

immature under rock below small roadside

rock grotto, ca 1 mi E Chestnut

Branch crossing. My impression is that

this surface species may be more limited

in pop size / distribution than any

other surface Nestus - obvious that area

has had fairly serious logging history,

perhaps w/ negative impact on the

species. The taxa requires more

study - perhaps look in Tusquite mtns.

continues mtns in N Georgia, east of

Chunky Gap Mtn. * see Also MCH 99-019)

MCH 99.017

TN: Hamilton Co., Crystalline City
Caverns (= Revere Mtn. Valley Caverns), J.
W of Chattanooga, Elev. 900 ft., 7 May, 1999
Search for more Nestius furcatus w/ cave
owner Steve Peltzky, sister-in-law Cathy
Vanell, w/ sister Pattie Peltzky. Based
on cave map, best habitats w.r.t.
low disturbance / potential food source /
stable habitat appear to be in vicinity
of "Janney's Room", below cave entrances
#1 & 2 & 3. Requires an ~ 1 hour trip
from main entrance, through nice stream
passage, some tight squeezes, 1 large pit.
IN bulk of room, of below entrance #3,
found first ♂ Nestius furcatus ever seen!! -
Elegant animal very long-legged,
Did not collect the individual. Found a reasonable
of adult ♂s sprinkled through entire room -
No obvious concentrations - 2 ♂s w/ egg sacs,
suggesting nice reproductive population. In total we
saw 1st, 98 (2 w/ egg sacs), 9 subadults (including 1 ♂).
1 of the ♀s was found in sleeping room #2, so
the spiders appear to be found in sparse #s
throughout cave (P. Peltzky suggests that this
is the case). Status - stable, decent pop'n?
Threats include quarry connected to system,
TVA herbicide treatment on puncheon above.
Ownership favorable to spiders.

3

MCH 99.018

NC: Clay Co., Hwy 175 / 64 jct.,
* of Hayesville, Elev. 8 May, 1999
- collecting in roadside habitat, old dirt road,
adjacent overgrown area near old building.
Holocentrus very common in grassy areas -
single ♂ / ♀ Holocentrus (!!) collected along
old track w/ small rocks - perhaps
a ♂ as well. Other NC Holocentrus known
from Whiteside Mtn., of Highlands, to the
east. Not the greatest habitat, but spiders
available. Had to cut-short the effort when
Sheriff arrived!!
MCH 99.019 NC: Clay Co., Hwy 64, 0.1 mi. SW
Scenic Overlook, W side Chunky Gulch Mtn., 1 mi.
SW Gap, Elev. 8 May, 1999
- collecting in moderate boulder-field on south
side of highway - fairly open canopy w/
apparent disturbance history, somewhat SW-facing.
Although there exists reasonable boulder-field +
small crevice cave habitat, the habitat is
generally dry. Collected single adult ♂.
Nestius under rock - probably the same
species collected e. Branch Creek on other
side of Chunky Gulch Mtn. Population apparently
limited. * Had earlier searched in cave forest e
head of Paddy Creek, W of Paddy Gap - obvious
logging history - some reasonable habitat, but no
spiders. Consistent w/ vicinity of "chunky gulch".

MCH 99-020 NC: Clay Co., Buck Creek
 Superfine Barren, 1.1 mi. NW jct.
 Hwy 64 on Buck Creek Rd. Elev.
 8 May, 1999 - collecting in largest
 serpentine barren in SE US. - comprises
 short grass habitat w/ limited
 either pine or oak open canopy. Collected
 1st ♂ *Hsplendens* (!!) / ♀ as well. Also
 found adult ♂ *Mazovia* !!
 immatures - oak litter w/ grass - on
 ground. Perhaps grey form of *M. incanens*?
 Nice habitat - needs more fire to maintain
 open nature w/ short burn history!

MCH 99-021 NC: Jackson Co., 0.1 mi. SW
 jct. Cullowee Mtn Rd w/ Tilly Creek
 Road - roadside on CMR Elev.
 9 May, 1999 - collecting w/ Fred Cogle,
 just down road (ca 3 mi) from his house -
 looking for undescribed species of *Mazovia*.
 (existing in open habitat adjacent to road,
 small herbs w/ light oak litter - probably
 mowed. Found *H. coarctatus* (common) / 1 ♂ *Hsplendens*,
 ♂ *Phlegre fasciata*, ♂ *Phidippus* (adult?).
 No *Mazovia* obvious - perhaps need habitat
 of more pure leaf litter ?? Last
 collecting site of NC trip - excellent
 trip !!

MCH 99-022 AZ: Santa Cruz Co., Pasa Blanca Lake,
 of Atascosa Mtns., Elev. 3800' IS MZ, 1999
 - collected ♂ / ♀ *Hymenitrix* on dry moss,
 lakeside.

MCH 99-023 AZ: Cochise Co., Dragon Mtns.,
 Forest Road 687, ~ 5 mi. N jct. March
 Middle Road Elev. ~ 5000' 23 MZ, 1999
 - collected ♂ *Paramazovia* *poultoni* on
 soil - nest found deep in "heart" of
 plant - spider coaxed out.

MCH 99-024 AZ: Santa Cruz Co., Madera Cyn.,
 above last parking lot, ~ 1/2 mile up, near
 stream Elev. ~ 5000' 26 MZ, 1999
 - collecting w/ J. Gatesy, C. Hargachi - they
 want *Eugenia* w/ the big tangled *Zenopsis* -
 collected many (>10) large figs of each, under
 rocks along vine, up slopes. Also collected
 many other spiders under rocks, adult ♂
Thadina on leaf litter, *Xysticus*, various
gnaphosids, *Stenobothrus*, *Hypocryptus*, *Olios*, *Selenops*.

MCH 99-025 AZ: Pima Co., Tucson - Waverly,
 Forest Streets ca 1 June, 1999 - adult ♂
Oecobiid, *Gnaphosid* collected in house

MCH 99-026 AZ: Pima Co., Old Sonoita Hwy, 1 mi E Hwy 83
 Elev. ~ 2500' 3 June, 1999 *Kibramoz* ♀♀ (*Electronidra*)
 collected under large rocks in yucca / soil / ocotillo
 grassland / desert habitat

MCH 99.028

Otag Mesa

8 June

5000'

MCH 99.028 AZ: Pima Co., ~ 5 mi. NW County

airgrounds, Elev. ~ 3000' 3 July, 1999

- collected adult ♂ Hustulatus "black-femured"
from on rocky ground in creosote flats.
Very surprising!! Late in year for this species
of Tucson (most collected from Nov - March).
♂ is in good shape. Also surprising
because white-femured is found in Tucson
Mtns., NW side of Santa Rita Mtns -
might be an eastern "tongue" extending
from of Sierritas (N-side) towards Rincons
(S-side) ?? Also collected 2 adult ♂
lycosids w/ tufted legs I (in grassy areas).

MCH 99.029

AZ: Pima Co., ~ 5 mi. SE just
Old Sonoran Hwy / Hwy 83 on Old Sonoran
Elev ~ 3500'. collected ♂ Metacryptus, ♂
H. pyrrithrix on litter beneath willow
tree near stock ponds.

MCH 99.030

AZ: Cochise Co., Ft. Huachuca

Military Base, Huachuca Mtns., Garden

Canyon Elev ~ 4500' - 6000' 8 July, 1999

- collecting w/ beating sheet along

Piparian zone / roadside up canyon.

~ 20 individual spiders collected for Cultagesini-

silk evolution work. Others include Philopine,

Thiodina, Pelegina, Sassacus, Minetid.

Collected Pardosa adults in wet meadow

nice utillid-nivic clubmids on ground.

MCH 99.031

AZ: Santa Cruz Co., Empire

Gienza, near ranch headquarters Elev ~ 4200'

10 July, 1999 - beating bunchgrass vegetation

at ~ 10-20 m off streamside. Little

theridid, Sassacus, clubmids

MCH 99.032

AZ: Pima Co., Arivaca,

just S downtown on Ruby Road (off stream)

14 July, 1999 Elev 3600' - blacklighting for

hexapods, many adult ♂ spiders attracted

to lights / prey. Nice philodromid, pholcid,

zreneid, gnaphosid, clubmids, tetrodectus.

MCH 99.033 WV: Greenbrier Co., Rt. 63
along Greenbrier River e Mulligan's Creek?

2 mi. E Alderson (int) 37° 43.740' N,
80° 35.706' W 666 m ± 40 m 9-19-99

- collecting the known locality for Hypochilus
gaetschi. Creek ravine w/ large sandstone
boulders, opening on N-side of river,
habitat mostly S-facing. Spiders
versusibly common on rock faces ~~w/out~~
w/out scouring (esp. not underneath
deep ledges). Seemingly to prefer
more exposed sites w/out tops
of Metz, Arachnoid, etc. Collected
6 adults of each sex, 6 immatures.
Saw adult ♀ w/ egg sacs - not
collected. Lots of other immatures.
Collecting in morning - cool. ♂♂
found both wandering, in webs,
and near ♀♀ webs. Spiders
collected over ~ 200 yard stretch
up stream bed. Adults in 80%,
immatures in 100% of obs.

103
MCH 99.034 WV: Summers Co., just E of
Forest Hill on Hwy 12, 5 mi. SW just w/
Hwy 3 N 37° 35.433' W 80° 47.475'
- Elev 668 m ± 30 m 19 September, 1999
- collecting near? old locality of "rairie
beside Hwy 12" - South side of Hwy w/
stream, steep-sided w/ rock ledges. Spiders
sparse initially, although many webs
present. Started up the hill on S-side,
found large sandstone boulders, then
large extensive sandstone outcrop.

Collected 5 ♀, 6 ♂ adults / 6 immatures.
Found 3 ♂ clustered together. Spiders
very common on large sandstone
outcrop. H. gaetschi. Most habitats S-facing.

MCH 99.035 WV: Mercer Co., Camp Creek State
Park, Campbell Falls trailhead N 37° 30.552'
W 81° 08.022' Elev 694 ± 26 m 9-19-99
H. gaetschi collected on sandstone outcrops W
of road (above). 5 ♀, 3 ♂, 5 immatures taken.
Many other ♀/imm seen, ♂'s scarce.
- collecting ~ midday, ♂'s retreating ??

MCH 99-036

WV: Raleigh Co., 1 mi E

just Hwy 41/61, at Grandview SP

37° 50' 8801 81° 07' 992' 819 m ± 22

- collecting both "above" and "below" road, N¹/₂ S,

all S-facing. Found all 4's, immatures

in mid p.m. seems very dry - ♂♂

in retreats? Came back in early

morning on 9-20. Walked rock

outcrops closer to road junctions -

collected 4 ♂♂, 1 immature pen ♂

MCH 99-037

WV:

Fayette Co., Rt. 21, ~ 2 mi.

N Beckwith 38° 06' 373' N, 81° 08' 864' W

Elev 270 m ± 59 19 Sept 1999

- wonderful habitat. huge sandstone bluffs

on both sides of road / stream. worked

SW of road, on N-facing rock face

Collected 6 ♀, 5 immature, 4 ♂ + 1 ♂ found

in Achaeranea web. Early evening.

MCH 99-038

WV: Fayette Co., Hwy 60

~ 1/2 mi SW Kanawha Falls (near falls)

38° 08' 579' N, 81° 12' 750' W Elev 244 m

(20 mV) 9-19-99 - collecting

after nightfall on S-facing bluffs

above highway / railway. Habitat decent

somewhat exposed. However, darkness

w/ huge influence - ♂ Hegatsch

everywhere - at least 10 seen in

short time period. 7 collected.

Also 5 ♀ / 5 immatures.

MCH 99-039

WV: McDowell Co., Hwy 83

c Atwell, just Atwell Branch Road

37° 20' 875' 81° 45' 957' Elev 400 m ± 41 m

9-20-99.

Rock bluffs South of road above

small town of Atwell - Habitat very

dry, despite most being N-facing.

Collected 5 ♀, 5 immatures, but

found only single ♂.

* webs seen in Welch, WV. Habitat

limited.

MCH 99.040 VA: Buchanan / DeKansan
county line, Hwy 80, 2 mi. W
entrance Breaks Interstate SP

37° 18.074' N, 82° 17.281' W Elev 489 ± 38 ft
9-20-99 - Rock bluffs on N side
of road - most 5-fings, but working
in late p.m. Curious, almost all
♂'s ant - collected 7 ♂'s, 2 ♀'s,
5 immatures.

* searched "River Trail" c Breaks Interstate
Park earlier in p.m. Very few webs
seen, despite tremendous habitat??

MCH 99.041 VA: Buchanan Co., Hwy 460, 6
mi W Shortt Gap, Tazewell County line
37° 11.389' 81° 51.061' Elev 504 (20)
9-20-99 - collecting on south side
of road, along small rock ledge c
dry streambed. Late evening - darkness.
5 immatures (5 ♀ (2 w/ egg sacs) / 1 ♂,
1 ♂ dead in web. Surprised not
to find more ♂'s w/ darkness -
perhaps past in season (♂'s w/
egg sacs??)

MCH 99.042 VA: Giles Co., Dismal Falls,

N 37° 10.985' W 80° 54.053' Elev 504 m ± 88 (20)

9-21-99 - collecting in early A.M.,
wonderful sandstone shelves on both side
of small stream. Hypocichlus fairly scarce -
had difficulty in collecting 5 ♀'s, 6 immatures.
No ♂'s seen. Might be late in season
for ♂'s this far south? Stopped
earlier near Burke's Garden, Narrows -
reasonable habitat, no spiders seen.

MCH 99.043 VA: Giles Co., CASCADES
of LITTLE SPRAY Creek, ~ 2.5 miles
of trailhead

9-21-99
- collecting @ night along rock boulders,
rock outcrops on N-side of trail (Sizing)
Fairly cool evening. Spiders scarce -
collected 5 ♀ / 5 immatures, but not
readily. No ♂'s seen - my suspicion
is that the male season has
passed (too late in year). Have
seen very few adult ♂'s in last
3 southern sites, despite good
collecting conditions.

MCH 99.044

CA: Shasta Co., Dog

Creek Drainage, W of Delta

on Sac River Elev ~ 1000 m

N 40° 55' W 122° 37' Oct 1999

- working mostly under stuff
(logs / rocks) in mixed pine forest,
much N-facing & moist

MCH 99.045

CA: Shasta Co.,

Shoreland Creek Canyon, W of

Meiss Lake N 41° 50' W 120° 10'

Elev ~ 1500 m Oct 1999

- rocky volcanics / talus on N side
of steep canyon edge; pine
forest

MCH 99.046

CA: San Diego Co., Arizona

Barro Colorado Island

Hayden Spring N 32° 42.627' W 116° 07.023'

Elev. ¹³³⁰ meters November, 1999

- habitat = large desert wash plus small dense
forest on southern edge - plants Chilopsis
(desert willow), Acacia, Hyptis dominating in
wash, few Palafoxia spinosus - on
dunes, Palafoxia sp?, low-growing
clumped grasses (Hilaria?) on top
of dune. Found wandering ♂
Aptostichus at night, 4 ♂ total,
all on dune sides (both N & S-facing
slopes). Also found small colpog
large immature lycoside. (not Geolycosa?)

MCH 99.047

CA: San Diego Co., In-Ko-Pah

County Rd, SW dead-end, N of I-8

N 32° 38.462' W 116° 06.592' Elev 1030 ± 23 (3D)

11-13-99 - collecting in shallow wash (decomposed

white granite) above original In-Ko-Pah site

(see MCH); collected 1 adult ♂, 1 ♀

(light gray unspotted). Good temperature,

like morning. Histiogaster from like In-Ko-Pah.

H. ustulatus slant- CA: San Diego Co., In-Ko-
 Pch Co. Pch Rd, N $\frac{1}{2}$ mi NE 1-8
 exit, N-side, 32° 39.172' N 116° 06.109' W
 Elev 964 m ± 19 (3-D) - Origin -
 In-Ko-Pch site, wash @ road
 Adult ♂'s seen, 2 ♀ H. ustulatus - none
 collected. Still too early for eggs??
H. ustulatus → CA: San Diego Co. McCain Valley
 Road, 3 mi N Jctc Rds to Sacaton Overlook,
 Carizo Overlook 32° 42.246' N 116° 15.505' W
 Elev 1215 m ± 34 (3D) 11-13-98
 107, ♀♀ H. ustulatus in sandy wash - not
 collected. H. ustulatus g imm on Antennae,
 + imm ♂ Philodromid. Too early!!

MCN 99 048 AZ: LA PAZ Co., EAST CACTUS
 PLAIN BLM WILDERNESS, ca. 1 mi.
 SW Midway Jct off SMOUSSEA Rd.
 34° 03.209' N, 113° 54.055' W 455 ± 25 m
 27-28 November, 1999
 - misc spiders - phobid collected e night e month
 of rodent burrows / theriid (Scotoba?) in
 similar situation - on stabilized dunes,
 in narrow crevices between dune crests →
Geolycosa burrows - one w/ earth
 pellets (pictures taken) - In gravel
 washes "below" dunes - theraphosid burrows.

1145
 N 32° 39.172' W 116° 06.109' W
 115° 05.505' W
 116° 15.505' W
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 200° 06.109' W

MCH 99-049 AZ: La Paz Co., Bill Williams
River & Mineral Wash N34°15.339'
W 114°00.590' Elev 164m ± 25 28 Nov, 1999

MCH 99-053 CA: Siskiyou Co., Big Springs,
Helen house
23-27 December, 1999
- millipede & carabids under lawn
rocks behind house

MCH 99-050 CA: Riverside Co., Head
of Deep Canyon, off Hwy 74
33°35.132' N, 116°25.560' W Elev 1145 ± 14
4 December, 1999 - collecting in
riparian habitats & canyon bottom w/
H₂O. Veg includes willows / cottonwood.
Collected various carabids under wet
gravel stones. Also Xysticus under
rock / philodromid on zinnia vegetation,
others. Collected immature Homalonychus
under granite rock on vides-top,
clearest diurnal vegetation.

MCH 99-051 CA: Inyo Co., Hwy 395, Ranch
Motel, of Olancha N36°15.372' W 117°59.
642' 1058 m ± 80 - collected on window sills
in hotel room - dictyoids / ♂ statobrya? / philodromids

MCH 99-052 CA: Siskiyou Co., Castle Crags Wilderness,
between Indian Springs & Castle Dome - 12/24/99

~~23-27 Dec~~ 22 Dec 1999
Elev 1165 ± 33 meters 41°10.317' N W 122°19.664' W
- collecting under rocks (granite) below S-facing outcrops
& in V-wine above Indian Springs - small epilobioid
collected in small rock slide, xeric condition -
good-looking Hypocrepis vocks; but no web scars
seen. nice Habronattus minus habitat on
top (cf. Castle Dome) - decomposed granite
barrens.

MCH 000-01

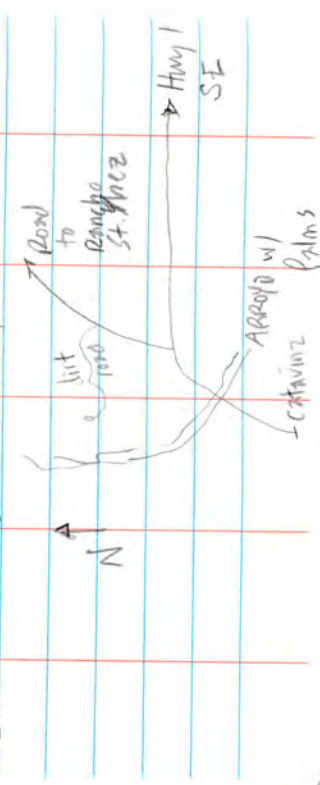
Baja California Norte, Hwy 1,
~5 mi NW El Rosario, 30°08.408' N,
115°45.799' W Elev. 50 m ± 16
1 January, 2000 - collected many ♂♀
Hustulites on small rocks in dry
desert wash (Cañada San Quintin). Collecting
w/ M. McMeekin, K. McMeekin, M. Fishbein, Michael Lowder (MCH)
30.1412 -115.7631

MCH 000-02

Baja California Norte, Hwy 1,
Fields N 29°46.954' W 114°46.127' Elev.
614 m ± 18 1 Jan, 2000 - Homalonychus
imm (including post) collected in
sandy granitic soils underneath loose
granite slabs - larger slabs w/
larger spiders No adults?
Pellenes ?? ♀♀ beetles ?? (found beetles)
Ambrosia detritoides?

MCH 000-03

Baja California Norte, Hwy 1
Arroyo Santa Inez N 29°43.721' W 114°42.572'
Elev. 549 m ± 31 2 Jan, 2000



MCH 000-03

- 2 ♂ imm Hustulites on small rocks in
gravel bars adjacent to main wash - excellent
habitat - very cool & windy.
(MCH 000-04) BCN: E of El Rosario, old
dirt highway N of Hwy 1 N 30°04.935'
W 115°27.904' Elev 335 ± 24 3 Jan, 2000
- coastal seep transition habitat - lots of Ambrosia
detritoides / A. detritoides? / brom / gramin / grass / shrub
- collected carabid under rock in dry wash
- Midred w/ ♂ Olios c night wandering
- Pellenes immature on small rocky gravel - poor
substrate for Hustulites.
(MCH 000-05) BCN: Hwy 1, 19 mi. E El Rosario,
N 30°03.741' W 115°28.486' Elev 470 m
♀♀ Pellenes sp / ♂♀ Hustulites (like 000-01),
Bothriocryptum? burrow? given to M. Lowder
3 Jan, 2000 5-facing, gentle slope
(MCH 000-06) BCN: Hwy 1 on Pacific, June field
N 30°10.188' W 115°47.806' Elev 74 m
3 January, 1998-2000

MCH 00-007 CA: Imperial Co., just N
Ocotillo, off Shell Canyon Road 32° 45.503' N,
116° 00.294' W Elev 63m ± 27 (30) 2.5-2000
- collecting in open, flat smoke tree wash / edge-
ambrosia dunes, creosote, ocotillo. Collected
Plectranthid under rock, caponiid (Orthomyces)
adult ♀ in moist "litter" compacted beneath
Ambrosia; tenebrionid under rock /
sarcophagids ?? bothering collected.

MCH 00-008 CA: San Diego Co., NW Ramona
just W of Ramona Landfill 33° 05.086' N,
-116° 52.046' W Elev 591 ± 32 m (30) 6 Feb, 2000
- collecting on iron-rich (red) chert
hard-pan, some sloping, eroded -
mostly chamise. Hustletts common,
adult ♂, ♀ pgs. Form w/ brush - low
like Santa Rosa Mts form (W like Elsinore),
but bi-colored (black creosote / brown ab)
like Pine Valley. Also w/ forehead
scales hinting @ Pine Valley, very
reduced & compared to In-Ko-Pah.

MCH 00-009 CA: Imperial Co., W of Ocotillo,
just W Sugarloaf Hill, 32° 43.826' N,
W 116° 03.721' W Elev 313 ± 20 m (30)
12 Feb, 2000 - collecting w/ 499 students
Dave Rhodes, Jim Cruick. - Psoralea /
Hymenocler wash - fine gravel / sand

MCH 00-009 - beating for Hysignatus.
Very windy. Nothing on Ambrosia just
above wash level. 2 ♀ Hysignatus, ♀
thomisid, ♀ insect?, ~~chrysomelid~~ on Hymenocler.

MCH 00-010 CA: Imperial Co., ~ 2 mi. N
Ocotillo, off Shell Cyn Rd., E & main wash
N 32° 45.452' W 115.59.430' Elev 81 m ± ?
12 Feb, 2000 - beating wash veg, little
Hymenocler, mostly ARIPEX POLYCARPA
♀ / ♂ signatus, ♂ thomisids, others.

MCH 00-011 CA: Imperial Co., ~ 2 mi N
Ocotillo, off Shell Cyn Rd, E & main wash
N 32° 45.488' W 115.59.861' Elev 85 m
12 Feb, 2000 - beating Hymenocler, some
creosote, ARIPEX. 3 ♂ Hymenocler from
ARIPEX, others mixed (no larvae). ♂
thomisids off differing creosote colonies from
creosote / others. curculionid.

MCH 00-012 CA: San Diego Co., Otay Reservoir,
NE Side 13 Feb, 2000 - scytodids under
rocks below high-water line, ♂ gnaphosid
in grasslands. Many hexapods - all from
flowering legume ⇒ non-native SENNA?.

MCH 00-013

CA: Imperial Co., 2 mi. N
Ocotillo site (see 00-011) 19 Feb, 2000
- collecting w/ students J. Rhodes,
J. Cruitt, Angeline Hamel - low desert
of ocotillo, Carreyz, Atriplex, Amorpha,
Prosopis juliflora - many ♀ sigaretus
from both Hymenoclea & Atriplex. 1 old ♂,
1 p ♂. Cruitt collecting other spiders
from variety of scrubs.

MCH 00-014

CA: San Diego Co.,
Mission Trails Regional Park, Ravine
on N-side Tortuga Mountain 20 Feb, 2000
- recent rains. Many schizomids
under rocks in ravine (Hubbardia) -
fairly common. Also Ortholasma,
but less common. Berles funnel
litter collected for class.

MCH 00-015

AZ: Yuma Co., I-8 @
Interlano Exit, 32° 48.104' N,
113° 32.389' W 208 m ± 30 (3P)

26 Feb, 2000

- collecting on Encelia flowers
along frontage road. Many
species of bees, some flies.

MCH 00-016

CA: Imperial Co., 1/2 mi
Junction Hwy 111 & I-8, 32° 46.034' N,
115° 30.109' W, Elev. ~ see lower
4 March, 2000 - w/ J. Cruitt, D. Rhodes
- collecting on roadside, abandoned
ag. area => short grass along road.
Artemisia + others in barren ground.
Heterosia, Hypochaeris in grass.
3 ♂ tharsalis w/ "narrow" faces, of Yuma
form. Philemids / thomomys / dictyodes
common beetles. Also tharsitus ♂ ♀,
Notiphidippus ♂ ♀, Sesaeus ♂, ant-eater
(SARANDA).

* CA: Riverside

Co., Hwy 74, above Jct
w/ of Deep Canyon, S of Palm Desert
- looking for Huatabius in perfect
gravel wash (33° 36.916' N, 116° 24.861' W)
Elev 1064 m Northridge ?!

Good weather (~75°F) 3-11-2000

MCH 00-017

CA: Riverside Co., 1 mi.
S Hwy 74, cf. SANMILL TRAIL HEAD
33° 34.792' N, 116° 21.075' W Elev 1253 m 3-11-2000
5 ♂ Huatabius - red shank "barrens". Spiders
not overly common, despite good habitat.
Substrate iron-rich, friable red.

33.5795 -116.4512

MCH 00-018 CA: Riverside Co. ~ 3 mi. E ANZA, Hwy 371, mouth of Hamilton Canyon 33° 33' 735' N, 116° 37' 516' W Elev 1387 m 3-11-2000 -116.6253 - broad sandy wash, mixed colors. Spiders, mostly ♂, common on reddish small pebbles. (Form ~ AS ABOVE)

MCH 00-019 CA: San Diego Co., Warner Valley, Lost Valley Truck Trail, ~ 1 mi. N Hwy 79 33° 17' 502' N, 116° 39' 364' W Elev 882 m 3-11-2000 * SAME LOCATE AS MCH 98-054 - ♂♂s exceedingly common on red nidgetop in pure CHAMISE. 33.2917 -116.6594 * (Form AS ABOVE)

MCH 00-020 CA: San Diego Co., Borrego Valley, vic Ram's Hill GC Borrego Spring Rd. 33° 12' 089' N 116° 18' 324' W Elev 150 m 3-11-2000 Hiscottdalei ♂ on Encelia (in flower).

W/ D. Rhodes, J. Conitt, A. Hamel * ♂♂s penultimate, some ♀♀s mature Hiscottdalei

MCH 00-021 CA: Imperial Co., Anza-Borrego Sp. ~ 1 mi N Fish Creek Camp 33° 02' 246' N 116° 06' 254' W Elev 62 m 3-12-2000 - "beetling" (w/ heads) Hymenocallis in smoketree wash. weevils. Hiscottdalei, ♀ Hiscottdalei

MCH 00-022 CA: San Diego Co., ABSD, Culp Valley, La Cienega 33° 12' 566' N, 116° 27' 621' W Elev 848 m 3-12-2000 - Lycosids on duckweed in H₂O depression.

MCH 00-023 CA: San Bernardino Co. 1/2 mi. N Hwy 62, N Skelton Rd. (w. of Oldale) 34° 07' 571' N, 115° 52' 749' W Elev 421 m 3-12-2000 -115.8792 Parathamnus, Hymenocallis wash - Hymenocallis beaten from Ambrosia (washed & above) and small herbaceous plants? / Parathamnus (in wash). SANDY, gravel soils. Both plants light - not on Hymenocallis?

MCH 00-024 CA: San Bernardino Co., Joshua Tree NM, El Dorado Mine Rd. (Riverside Co. Rd.) - between Cholla Cactus Garden & White Tank Canyon 33° 56' 458' N 115° 58' 216' W Elev 905 m 3-18-2000 -115.8792 Habitat - jumping cholla common on level floor. looking for Hiscottdalei in wash proper - typical sandy pebble microhabitat. Very nice - NADA.

At level just above wash (no more there)
1 meter) - none pebbles thru sand substrate
10/29/2008 Hustulzeta found - very small, very
cryptic. Form like NEVADA??

MCH 00-025 CA: San Diego Co, Silver
STRAND, of South Border of 32.6093, -117.1376
State Beach 32° 36.560' N, 117° 08'
025' W Elevation ~ sea level 3-19-2000
- stabilized intertidal dunes (low),
mostly covered w/ Iceplant, some
Cammossia. ♂ Hustulzeta? found
on top of iceplant (sparse covering).
No others seen in several additional
hours of searching (fairly cool/windy).
Also ♂ Hopliiformis / Helegans ♂
seen. Interesting scorpions found
on iceplant

MCH 00-026 CA: Imperial Co., vic Ocotillo,
~ 2 miles, 32° 45' 24.88' N, 115° 59' 59.86' W
Elevation 85 m 26-24 March, 2000
collecting in creosote / smoke tree habitat.
w/ Imperial Arthropod's students. Mostly
Noctuid stuff. Spider highlights -
♂ boxcrales, ♂ Pleurod, amphipod, black & white
gryllid - all on ground. Others -> lots
of small, round tenbrinids, some Eleodes,
many adult antlions.

MCH 00-027 CA: San Diego Co., McCain
Valley Road, just N just 102's to Sacton
Overlook / Carrito Overlook 32° 42.246' N,
116° 15.505' W Elevation 1215 m 27 March, 2000
50', 394 Hustulzeta (cf. Inko? from) collected
on hard slopes w/ small granite rocks in
redshanks (Admonstans) hab. nice ♂ Philippius
(red ab/bk cyphalotryx), pengulid

MCH 00-028 CA: San Diego Co., Palomar
Mtns, trail from Telescope to Campground,
Elevation 5000-6000' ft. ~ 33° 20.495' N,
116° 52.340' W 1 April, 2000
looking for undescribed Maderia in
pure oak litter - no luck. Did find
H. kawini in grassy wet, small valley.
Also ♂ Philippius H. oregonensis.
Myliopodes, beetles under rocks. One beetle
suspect.

MCH 00-029 CA: San Diego Co., NW Pine Valley,
Pine Creek Trailhead 32° 50.236' N, 116° 32.496' W
Elevation 1100 m 6 April, 2000 - collecting w/
D. Rhodes, J. Gracitt
~ collected various insects (mostly wasps, some flies,
small green sphingid). HKawini / Hschlingeni
very common in riparian tree, Horegonensis in
leaf litter, Pellaea subadults

MCH 00-030

CA: San Diego Co., Otay

Lake, NE side 32° 38.068' N,

116° 55.245' W Elev 162 m

8 April, 2000 - 20⁺/37 Pellaea

on dirty barren ground, 20⁺ Heliopsis

in grass, ♂ Salix at base of

CA sage.

MCH 00-031

AZ: Yuma Co., 9 mi S of Yuma (J-8)

on Ave 3E 32° 33.188' N, 114° 34.009' W

Elev 30 m 4-13-2000 (E on Col 19th St.)

- collecting trip w/ Dave Rhodes

- 6 adult ♂♂, 6 adult ♀♀, many immature

Hibiscus nigricans - all collected on

flowering Dalea emoryi on stabilized

dune, somewhat disturbed, Metzgeria

membr. ♂♀ is well, but uncommon - Many

Thermophilids seen / small saplings

MCH 00-032

CA: Riverside Co., off Rice Rd.

(Hwy 177), just E Desert Lily Preserve, w side

Palen Lake 33° 47.783' N 115° 16.103' W

Elev. 80 m 4-13-2000 x night collecting -

highly stabilized sand hummocks w/ mesquite

separated by sand/gravel flats w/ creosote

/ Atriplex: 4 tarboid species, others,

very pale greyish, ♂ filistatid

x - H. nigricans / H. scottsdalei (2 ♂♂ collected) on Atriplex in

1 mi. - brachy (4-14)

MCH 00-033

CA: Riverside Co., NE

Desert Center on Hwy 177 (Rice Rd.), roadside

33° 46.708' N, 115° 19.280' W Elev. 16 m

4-14-2000 - abandoned lot m roadside -

mesquite w/ Jojoba fields. Beating weedy Dalea

emeryi (in flower). Many ♂♀ H. nigricans,

fewer H. scottsdalei (70⁺/44)

MCH 00-034

CA: San Bernardino Co., Hwy 62,

E of Iron Mtn. Pumping Plant Rd. S side

Danby Lake 34° 05.705' N 115° 02.758' W

Elev 314 m (4-14-00) Palo Verde, Smoke tree, Hymenoclea,

Buchneria wash, w/ some Dalea emeryi in

sandy edges, creosote / Ambrosia dumosa

in elevated plains. Collected ♂♀ H. nigricans

() most on Ambrosia, Dalea

H. scottsdalei / H. nigricans in Hymenoclea.

MCH 00-035

CA: San Bernardino Co., Hwy 95

S of Needles 34° 45.710' N 114° 35.812' W

Elev 230 m 4-14-2000 - creosote / Hymenoclea

dominant, small rocky wash (dry). H. scottsdalei ♂, ♀,

no H. nigricans?

MCH 00-036

CA: San Bernardino Co., Calico Exit c 1-40,

underpass N 1/2 mi E WATER RD. 34° 50.884' N

114° 57.753' W Elev 600 m H. con juncha? ♀

4-14-00

MCH 00-037

CA: San Bernardino Co.
Cadiz Dunes 34° 23.622' N 115° 25.4226' W
Elev 250 m 4-14-2000 (+ 4-15)
- lush creosote at edges / on dunes, *Atriplex* +
on more stabilized flats / clay pans.
Beetles veg ♀♀ *Synsphaerodes* (nocturnal?) / lots of
Hesperis / *Hesperis* ♀ on creosote. Night
collecting fine beetles good - 4-5 species
of tubifid. - Shiny and species very
common, some on open dune. Smaller
hirsute taxa rare?

MCH 00-038

CA: San Bernardino Co., Granite
Mtns., Kelburn Rd., near summit
W 34° 48.255' N 115° 36.720' E elev 1320 m
4-15-2000 *Pellaea* male collected on
granite cobble

MCH 00-039

CA: San Bernardino Co., Kelso Dunes,
side of visitor parking lot 34° 53.572' N,
115° 41.861' W Elev 705 m 4-15-2000
- tried beheading *Petalonyx*? / bunchgrass on
stabilized dune, ♀ *Hesperis*. Flows to due edge /
upland w/ creosote / *Ambrosia* / *Hesperis* →
3 ♂ / ♀ / imm on *Ambrosia* / *Hesperis*.

* *Hesperis* ♂/♀ in copula beheading*

MCH 00-040

CA: San Bernardino Co.,
Kelso Depot N 35° 00.738' W 115° 39.262'
Elev 700 m 4-15-2000 Bees on
flowering creosote.

MCH 00-041

CA: San Bernardino Co., Kelburn
Road, 35° 12.576' N 115° 52.573' W
Elev 600 m - road meadow roadside - (size)

MCH 00-042

CA: San Bernardino Co., Affton
Canyon / Mojave River W of Canyon Proper
35° 02.664' N 116° 24.258' W Elev 480 m
4-15-2000. Restored (attempting to rid place of
Tamarix) riparian in main channel / sandy
uplands w/ mesquite / *Atriplex*. Found few
negative beheading *Hesperis* (♂/♀), some
Hesperis in grass along
river channel - not too wet, not too
salty best (4 ♂ / 3 ♀ collected).

MCH 00-043

CA: Kern Co., Redrock Reservoir Rd.,
1 mi SE of Hwy 14, Fremont Valley
35° 51.49' N 117° 56.266' W Elev 645 m
4-15-2000 Sandy wash below road
5 ♂ / ♀ *Hesperis*, most on *Hesperis*. *Phidippus* imm /
Hesperis ♀? *Synsphaerodes*, *Hesperis* on *Atriplex*,
Artemisia.

MCH 00-044 CA: Inyo Co., Lake Searles,
 N Argus (Toop) N 35° 48' 32" W 117° 20' 704'
 Ew 548m 35.800 -117.34508
 4-16-2000
 - Atriplex / undet changed flats w/
 occasional Hyemoloe. Hsigratz / Hsattszdelei
 mixed => Scattszdelei not in Hyemoloe.

MCH 00-045 CA: San Bernardino Co., upper
 Dumont Valley, off Hwy 127
 35° 36' 549" N 116° 15' 005" Ew 220m 4-17-2000
 - ♂ Heidid? on Artemisia

MCH 00-046 CA: San Bernardino Co., Salt
 Creek Hills BLM riparian tree,
 35.8232 -116.2820 Ew 209m
 N 35° 37' 391" W 116° 16' 954"
 4-17-2000 Hsigratz immatures / ♀♀
 beaten from Atriplex near
 riparian. Hsattszdelei c well, some
 in Hyemoloe. Hicnyglei? ♀♀ unclear
Atriplex
 - Hhazlini (200/4) "singing" from
 down reeds / woodpile near water,
 tall reeds.

MCH 00-047 CA: Inyo Co., Tecopa, near
 Grimshaw Lake yn NA, 35° 51' 131" N,
 116° 13' 613" W Ew 390m 4-17-2000
 - ♂♀ Hfestus (or cf fatus?) in saltgrass
 flat - on top of grasses.
 MCH 00-048 NV: Clark Co., Hwy 170,
 w/ mi SE Riverside, S side Virgin River
 N 36° 43' 929" W 114° 12' 583" Ew 458m
 4-18-2000 - wonderful wash w/ rich
Hyemoloe (fatus) / Benthomys / ecopate /
Ambrosia - windy, fairly cold -
 no Hsigratz found

MCH 00-049 CA: Inyo Co., Eureka Valley Dunes,
 37° 06' 038" N 117° 41' 028" W Ew 900m
 37.10063 -117.6838
 20 April, 2000 - small iridescent pink weevils
 found at dawn / dusk, most others nocturnal
 or crepuscular. Hsigratz mostly adult ♀♀,
 1 (or 2) ♂♂ also collected. Essentially all from
Atriplex + flanks of dunes - apparently
 preferring smaller plants. Some
Benthomys species (rather spiny, sweet + soft)
 also found on / inside dunes field on flats
 - no spiders found on these.

* (w K. Grand Ave)

MCH 00-050 CA: Inyo Co., N Fork
Valley, N 37° 16.848', W 117° 52.473'
Elev. 976 m 20 April, 2000 ♂ Hesperatus
better from Ambrosia. Nothing in
Hesperatus?

MCH 00-051 CA: Inyo Co., Hwy 168
Owens River N 37° 0.726', W 118° 15.942'
Elev 1120 m 4-20-2000
collected Hesperatus ♂/imm in short dry
grass / Hesperatus ♂♂ on dry weeds /
imm Hesperatus group wet grass

MCH 00-052 CA: Inyo Co., Saline Valley
Dunes, N 36° 45.324', W 117° 51.926'
Elev. 242 m 4-20-2000
low flat dune field, but fairly large in
area; beetles at night; Hesperatus better
off Atriplex - most small, in sandy
area at dune edge

MCH 00-053 CA: Inyo Co., N end Saline Valley,
N 36° 59.480', W 117° 56.324' Elev 1609 m
4-21-2000 Immature Pellaea (♂/♀) on
small rocks in sandy alluvial fan
habitat

MCH 00-054 CA: Mono Co., Hwy 6, N
of Bishop N 37° 29.524', W 118° 22.086'
Elev 1324 m 4-21-2000 - ant-nimic clubmoss
on pumice flats
MCH 00-055 NV: Esmeralda Co., Hwy 6, 10
mi. Junction of "Volcanic Hills"
W of Gold Lake -118.0780
N 38° 00.804', W 118° 04.199' Elev 1448 m
4-21-2000 "red" hill S of highway
- Hesperatus on small pebbles

MCH 00-056 NV: Lincoln Co., Junction Highways
308/1375 of Crystal Springs
N 37° 31.971', W 115° 13.838' Elev 1445 m
4-22-2000 collecting roadside picnic area,
south of highway - short grass w/ Chrysothamnus
intertined, near cottonwood (w/ cottonwood litter)
- silty soils / 100% / 79 Hesperatus collected, many more
seen - no obvious habitat preferences?
Hesperatus: 12 ♂ / 1 ♀ / 6 ♀ Hesperatus - essentially
all seen collected - perhaps a preference
for more open habitats w/ silty openings,
combination of grass (sparse), cottonwood
leaves

[MCH 00-057] NV: Lincoln Co., Hwy 93, 11.4
mi. N jct. Hwy 163 N 36° 58.192'
W 114° 58.619' Ew 800 m 4-22-2000
- creosote / ambrosia sandhills adjacent
to landfill 07/59 Hesperis bedden
from smaller Ambrosia.

[MCH 00-058] NV: Clark Co., Cactus Springs
N 36° 34.609' W 115° 43.372' Ew 948 m
4-22-2000 imm Phidippus / Hicnoides
off Atriplex / Hesperis

[MCH 00-059] NV: Nye Co., Hwy 160, ~1 mi
S jct w/ Hwy 95 36° 33.190' N 116° 07.530' W
Ew 803 m 4-22-2000 w/ w/ Hesperis,
Ambrosia, Atriplex above & Hesperis from
Ambrosia, many others better of ant success

[MCH 00-060] NV: Clark Co., Hwy 95, S of
Boulder City, Eldorado Valley N 35° 48.475'
W 114° 56.480' Ew 640 m 4-22-00
- beating Hesperis in wash → ? Hesperis?
(somewhat matted).

* Summary of April Mojave / NV Trip:

MCH 00-061 CA: San Diego Co. Palomar Mts.,
 trail from Telescope to campground.
 Elev. 5-6000' ft ~ 33° 20.495' N
 116° 52.340' W 4-29-00 Hkawini
 collected 25 adult, ♂ & ♀ common in
 open dirt areas in grassy swale
 3 large p & q undescribed Mzeah
 in pure oak litter along ridge top
 spending most of their time under
 litter? p & q Hercynensis in
 sunny areas of oak litter.
 Asilids in wet meadows / sycamore
 beetles in same stream.

MCH 00-062 CA: San Diego Co., Silver Strand
 State Beach, Santa and 32° 36.560' N,
 117° 08.025' W Elev. sea level
 6 May, 00 - collecting on low
 intertidal stabilized dunes, mostly
 iceplant. ♀ / imm & Hustulatus on
 small patches of open sands - none
 seen in vegetation, none on open
 dune w/out some vegetation.
 2 ♂ Hecliformis, imm & drosophila-like
 under shells on open beach, ♂ Stethid-

MCH 00-063 CA: Riverside Co., Santa Rosa
 Mtn. Rd., NW-facing ravine 33° 33.356' N,
 116° 29.289' W Elev ~ 1980m 5-27-00
 - steep canyon below St. Rosa Springs,
 day on S-facing side, conifers / moist on
 N-facing side. some H₂O - insects very
 active, many leps, bumblebees, wasps.
 - nice green bumblebees w/ long tongues
 on Monardella nana. ♀ Tetragnatha in
 grass / large zodariids under rocks in
 pine litter

MCH 00-064 CA: Riverside Co., Santa
 Rosa Mtns. Road, SW "corner", finger
 ridge N 33° 32.034' W 116° 28.339' Ew 2170 m
 5-27-00 - sandy / gravel flat bench, opening
 in Arctostaphylos chaparral - lupines,
 low Lotus flowering - Pellaea on
 ground. Xylocopa, small Xylocopinae?
 wasps, tachinid? in flowers. - many
Bembix seen, not collected

MCH 00-065 CA: Riverside Co., Santa Rosa
 Mtn. Road, midway? along ridge top,
 between peaks? N 33° 32.202' W 116° 27.418'
 Elev. 2406 m 5-27-00 ♂ Pellaea -
 open ground / litter in pine forest.

MCH 00-066

BCN: 1512 Grdzulpe,

NE Anchorage 29°09.322' N

118°17.048' W Elw. just above sea level

4 June, 00 - beetles (stephelinids?)

under decaying seal carcass.

MCH 00-067

BCN: 1512 Grdzulpe, South

Cypress grove 29°05.417' W 118°18.345'

Elw. ~ 4000 ft. 4-6 June, 00 - grassy

areas adjacent / beneath cypress trees

(including) dwarfed trees - Habronattus

Silphus ♂!!; Xysticus imm under

rock in open; large ♂♀ Lycosa under

rocks / logs; ♂♀ Stenobothrus everywhere - very

common on ground; Graphis (

found only on trunks of live trees; ♂♀

Pellenes found on stabilized open dune

ground, gentle slope; small ants

under rock; large ssp. tree associated,

many up in trees / on trunk; dormitory

everywhere on trees; large thysanura mostly

on dead, downed trees w/ slick

surfactant; Calosoma on ground; various

tenebrionids on ground & some in trees;

osmophilids on tree

- NW limit of "South Cypress Cove" ~

03714360 03219057 N 3812 ft. - Elw.

MCH 07-068

MAIN

BCN: Isla Guadalupe, Springs
0371090 E 3221437 N Elev 3468 ft. (SUR)

5 June, 2000 (29°06.889' N, W 118°19.493')

- main springs is in large cacti bottom above

SW of NE Anchorage, severely compromised

by goats - mostly foxtail grass following N

40 yards of moisture, then drying -

little open veg. Collected nymphs, etc.

large *Czlosoma*, *Bembidion*, often carabids

under rocks w/ moisture - ♂♀

erigonines in same situation.

MCH 07-069

BCN: Isla Guadalupe, North
Cypress Grove 2906.36.6 N W 118°19.348

Elev. 3954 ft. 6 June, 00

- under rocks in more dense cypress grove,

duff more intact, more shaded hab

- millipedes, diplopods, land snails,

pseudoscorpions, large lycosids

MCH 00-076

BCN: Isla Guadalupe, Pine grove
high on NE Ridge, ~ 2 miles? above

lookout (Elev 3988 ft) 29°08.502' N

118°19.199' W 6 June, 00

- beeting pine trees - chrysomelids (several),

3 mm *Paranazaspissa*, small black spider,

small curculionids, ladybird beetle, immo

Hagises / *Pellaea* on ground.

MCH 00-077

Isla Guadalupe, vic. Old lookout on
North Point (1/2 mile above lookout on ridge).

6-7 June, 00 - other persons collected *Gryllus*

(low grass in area?); 2 *Scaphisoma* (associated

w/ pine trees) / *Czlosoma* on ground,

other carabid "litter" / oostomid on pine

bark at night; J. Reber collected ♀

Xysticus (in pine duff?); - in oak / Brewer

canyons to west collected ♀ *Misumenops* (?) ♀

Metopiaz? in palm frond. * PALM GROVE

(29°09.571' N 118°19.084' Elev. ~ 2546' ft.)

- working west down hill (2 mi?) to Palm

canyons w/ oaks → more *Metopiaz* from oaks

imm. *Phanias*? from oaks

* Pine Camp - N 29°09.380' W 118°18.707' Elev. 2900'

MCH 00-072 Isla Guadalupe, NE
 Anchorage 29° 09.322' N 118° 17.048' W
 - sea level - spent night on beach - found
 many loxosceles, Oecobiidae, saw
 (did not collect) Oonopidae (minute),
Malpighia very common among cliff
 edges, in humus-associated trash,
 also on cholla in canyon. large
gnaphosid on cliff walls. Saw
roaches around abandoned
deveillers / cat.
 * Higias carcasses found in messy web-
 low elevation / day habitat

MCH 00-073 Isla Guadalupe, WEST
 Anchorage 28° 57.963' N 118° 18.061' W
 - sea level 8 June, 00' collecting
 small canyon south of village, w/
Carpobrotus, Atriplex, poppy, Aster -
 very sparse, but some things in
 flower - many large Megachile /
Danile in flowers - of course, also w/ lots
 of flies (Calliphoridae / Sarcophagidae). Interesting
 wasp w/ red abdomen not yet seen.
Higias associated w/ Carpobrotus / Atriplex
 reasonably common (lots of immatures).

MCH 00-074 Isla Guadalupe, etc.
 Airstrip 29° 01.211' N 118° 16.661' W 1923 ft.
 8 June, 00' coll. J. Rebman - gnaphosids
 y' large lycosid

MCH 00-075 Isla Guadalupe, Infantaia
 de Marina (southern tip), 28° 52.986' N
 118° 17.526' W Elev. ~ 200 ft. 8 June, 00'
 - collecting on lichen-covered low mesa just above (E)
 of military camp, found jet black gnaphosids
 (Notolaima?), decapids, saw loxosceles, 2
 new species of ant (one tiny black, 1 medium
 brown), Xysticus ♀ w/ egg sac, interesting
 beetles - 211 under rocks. Pseudoscorpions

MCH 00-076 BCN: Isolate Alcatraz (= Toro)
 28° 52.530' N, 118° 17.848' W 9 June, 00'
 - early A.M. chopper vial to Alcatraz, large
 islet closest to southern tip of main island
 (= "lower" island). volcanic habitat, native veg
 in flower - collecting effort mostly under
 rocks, both large & small. collected Kibromor
gnaphosid ♀ / imm., large brown gnaphosid, Xysticus ♀,
cerambycids (fairly common), lycosids, large red mites,
 and snails, psocids, Metacynob ♂♀, Habroplitis
bigas Micrila? , b/w gnaphosid ♂♀, curculionids
tribe vinids (mostly det.), carabids - a gordale island, no humans
 before our trip!!

McH 00-077 BCN: Isolate Afuera (= Zapato) 2m.
 (= outer islet) 28°51.00' N 118°16.46' W
 9 June, 00' choppy ride to outer islet,
 ~ 12 spots. Agziri, veg in flower,
 very similar to Aldabra, but w/ a
 few iceplant, some evidence for
 more human impact. some faunal
 similarities w/ Aldabra - *Nekyura*, *Lygids*
 Hgizz: large *Lygoid* here / on mainland,
 Not on Aldabra - same for black
 graph / same for *Stomatopoda* - no
Sargassum (b/w graph) ?? / no
Kibria ?? - comp exclusive via
 black graph / *Stomatopoda* / (ycast) ?? -
 mega chile (also seen on Aldabra),
 cool red abdomen, *Synphid* - endemic ??
 Not seen elsewhere on island !!
 - land snails different from those
 AT cyprus group / AT Aldabra

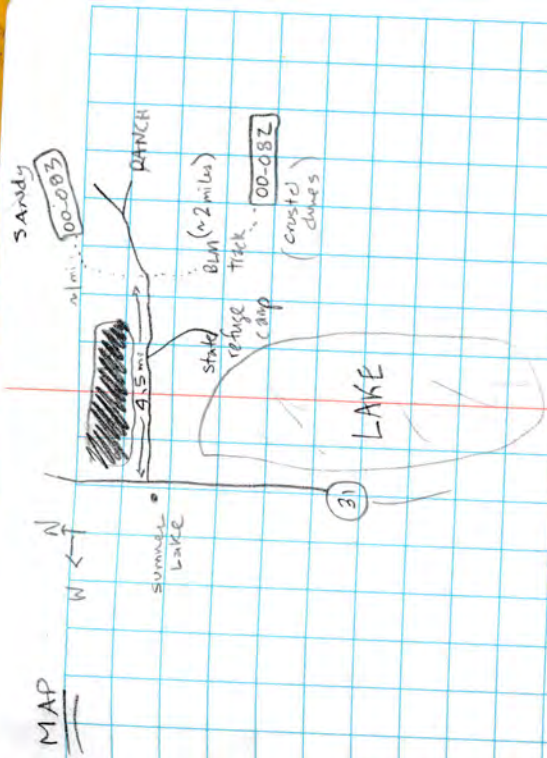
McH 00-078 Shasta Co., CA, 17 June 2000
 elev. 7263 ft, N 41°21'31" W 122°13'53"
 per ♂ on rocks next to small ~~shrub~~ bushes
 LA side of main road; ~ 1 mile long w/ GPS
 reading @ center; 1 adult male found on
 surface of snow.

McH 00-079 Siskiyou Co., CA, 17 June 2000
 41.3559, W 122°14'01", elev. = 7002
 N 41°21'35" W 122°14'01" elev. = 7002
 ~ 1 hektar area across from first parking
 camping area; all found on small + med
 rocks in jun. More abundant at you
 search up the slope of this rocky area.
 None were collected near any of the trees
 (prim) that spot this area. GPS reading
 @ center of area.

McH 00-080 CA: Siskiyou Co. Grass Lake
 Rest Area, Hwy 97 41°38'57" N
 122°10'04" W 122°10'04" 18 June, 00'
 - NE side of Rest Area (beyond fence), 9-10 AM,
 perfect weather (75°F, no wind) - transition from
 marsh grassland to sage upland, many herbs,
 tule debris, low-growing collected 487 ft
Humistricta, most in short grass, close
 to wetter, taller stuff. Also ♂/♀
Ukuba, most above *musticula* herb
 in places of low-growing *owdage* +
 debris. often spiders included *lycosids*,
 particularly is one approached H₂O,
Tetragnatha, Tibellus, site very
 rich in terrestrial arthropods.

MCH 00-081 OR: Klamath Co., Crater Lake National Park, Pumice Desert
 43° 01.672' N 122° 07.165' W Elev 6020'
 6-18-00 SCORIA + pumice flat, 48' x 14'
 H. amnicolus; males found on scoria; young and in good condition; can't windy w/ some sun.
 Few large rocks; mostly small/mid sized rocks.
 On far side of flat (away from parking area) the woody/grassy area harbored many ♀ H. amnicolus.
 No males.

MCH 00-082 OR: Lake Co., NE side Summer Lake
 42° 56.941' N 120° 10.207' W Elev ~4200'
 18th June, 00' - night collecting in stabilized dune fields, mostly crustal, rather than sandy - 3 tree species, 1 scarab
 1 ♂ gnaphosid, Zrenobates? imm seen, not collected * (cold & windy)
 - beetling in A.M. - either Atriplex (low) or biger halophyte (Chrysothamnus?) - Pterodroma ♂
 Sissurus imm, thomisid ♂ ♂ zrenobids, weevils, Hamatibia



MCH 00-083 OR: Lake Co., NE side Summer Lake
 42.9907° N 120.5842° W 120° 41.379' Elev 4240.4'
 19 June, 00' - stabilized dune fields, much of area w/ good sand substrate, had pm depressions - diffus from previous site including sparse grasses & Chrysothamnus; animals (by observation).
 gnaphosid includes Anthracinus ♂, gnaphosid, Pterodroma, zrenobid; single ♂ Hamatibia (small & reddish) on open sand, small blowout w/ short grasses + redrootbrush.
 - HUGE surprise, Hesperis (♂, 54) all on open sand in flat area w/ sparse grass.
 Many Chrysothamnus wood-beaten plant succulents. Here animals apparently living in open sand, not scrub-dwellers.
 (time ~ 10 AM → 1 PM, fairly windy)

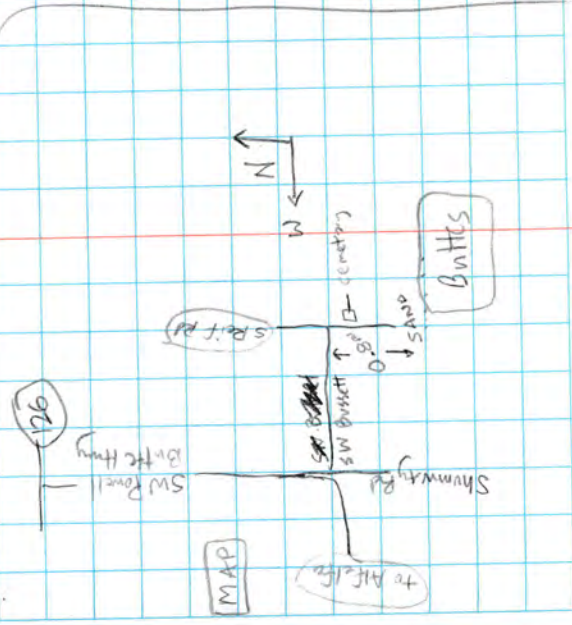
MCH 00-084 OR: Lake Co. Highway 31 165
 mi. S Silver Lake, N 43° 02' 127 W 120° 47' 608
 Elev. 4760 ft 19 June, 00'
 - roadside fresh H₂O marsh, Habenaria ♂
 in short herbaceous stuff ~ 100 yds ff H₂O
 - ♀ seen, not collected

MCH 00-085 OR: Deschutes Co, Hwy 126 E
of Redmond 44° 15.587' N 121° 06.912' W
Cw 3150' H 19 June 00' - Sandy juniper
flat w/ Artemisia + Chrysothamnus - disturbed
by cattle; w/ nonnative grasses. collected
♂/♀. Hirsutus, M. uitz, Hamatelia common,
thymusids, other Metaphichne (= Pelagius)
- no Hamicus ?? perhaps not enough
effort, perhaps too disturbed ??

MCH 001086 OR: Crook Co., Powell Buttes
w. 19625
I of Shumway Road N44° 11.775
-121.02698
w 121° 01.618 19-20 June, 00' Along roadside; sandy
area w/ sparse shrubs - a few scattered trees -
very few grasses; bent Artemesia (elev. 3560)
for Hamner - many females found on ground
after beating; 1 ♀ found on ground under Artemesia
♀ seem to prefer smaller Artemesia, and seem to stay
near bottom of bush. No males found. ♂ could have
"worked in here all night". All ♀ males seem small but
Hamner said all other individuals suggest 1 ♀ mated -
need more.

20 June 00

- 24 observed just after emergence next to rch.
~ 9:15 AM; adult Scaph fairly common for a brief time
period; 4 emerged well away from Artemesia; several
juv. were located earlier in the morning after hatching
Artemesia; majority ^{adult} obviously were observed
on open ~~est~~ sand, not near Artemesia; 25 were
observed humping around on lower limits of Artemesia
~ 5 in. from sand surface; 1 ♂ found sitting on small rock
in back condition, suggesting he is one of the last surviving ♂
No pen ♂'s were found; Few adult ♂, more adult ♀,
and a juv. class not yet mature enough to sex → Reg. cycle?
Are juv. associated w/ Artemesia and adult? not?



MCH 00-087 OR: Clackamas Co., Mt. Hood
 above Mt. Hood Meadows, N 45° 19.95' N 121° 40.44' W
 Elev 5832 20 June, 00' grassy hillsides, +
 open rocky ridge top above treeline - Hemerocallis
 common, more abundant in grassy hebs,
 but seemingly in all habitats.
 searched for Hemerocallis in open rocky
 hebs - none seen, conditions good,
 probably not there.

MCH 00-088 OR: Wasco Co., Columbia River
 Dunes, ~5 mi NW The Dalles on I-84
 N of Crater Point N 45° 39.865'
 W 121° 13.253' Elev 140ft 20 June, 00'
 small dunes along Columbia River; area highly vegetated
 by the remnant of old dunes. Hemerocallis 83% abundant
 along sand surface; retr. clearly visible (in large %s) on
 sand surface; sparse greater; weeds along entire area
 overall habitat very limited; sunny & windy during time
 of collection; Catalpa biondita? ~~weedy~~ Elgynia (daisy)
Ligustrum present in habitat.



MCH 00-89 OR: Tillamook Co., Nehalem Bay
 State Park, inland near airstrip
 N 45° 42.108' W 123° 55.874' Elev + sea level
 21 June 00' - beautiful open sandy flat/hillsides ~1/2
 mi. inland, in pine openings N of airstrip - Hemerocallis
Silene; beach dunes closed at backdune by Eur
beachgrass; fireweed w/ spotty glaucous - Moss.
 MCH 00-090 OR: Tillamook Co., Sand Lake Rec Area,
 Fishermen Dug Vex Area 45° 16.926' N 123° 57.385' W
 Elev + sea level 21 June, 00' - perfect
 Haploids? habitat just south & east of
 parking lot, adjacent to river inlet -
 low grasses/herbs sparse over sandy
 flats - Hemerocallis only. Better - Constance
Hemerocallis habitat across the river (SE),
 open sandy w/ occasional grasses -
 more Hemerocallis?
 * stopped in p.m. c Oregon Dunes National Rec
 Area, South Jetty Dune road just south
 of Florence. habitat very nice & extensive
 - lots of low-growing herbaceous veg w/
 sandy substrate, also areas of open
 sand. dominant w/ sparse grasses - Very
windy during our visit, no Hemerocallis
 seen.

MCH 00-091

OR: Curry Co., mouth of Pistol River
N 42° 16.529' W 124° 24.315' SW near low
22 June, 00 - dune field @ south end of
river mouth, much Eucalyptus grass - good
internal low herbaceous (Hypoxis?)
habitat limited?? very windy - no
luck w/ Hesperomys

MCH 00-092

CA: Del Norte Co., Smith River
Dunes SP, northern end
124° 11.301' W SW - sea level
- perfect weather @ very extensive dune system S of
river mouth; 24 dune grass = problem, most of
dune stabilized @ northern end, Hesperomys hab limited
- good low herbaceous stuff, no Hesperomys seen??
Need to return!!

MCH 00-093

CA: Humboldt Co., Stone Lagoon
N 41° 13.502' W 124° 25.939' - Elev. sea level
22 June, 00
- low sand dunes on spit, w no Euc
beach grass - dominants of verbenas (yellow),
beach morning glory, grass - very clean, no
weeds - collected Hypoxis ♂♀ in
mid-pm, fair, common

MCH 00-094

CA: Humboldt Co., South Spit
Humboldt Bay, southern end, near end of
Table Bluff Rd, N 40° 41.845' W 124° 16.353'
Euc - sea level 22-23 June, 00; 4 Adult and
juv. Hesperomys common on sand along dune next
to shore, adult females were common in late afternoon and
mid/late morning; juv. Hesperomys seem to stay farther
inland and appear to be attracted w/ veg. much more
Adult ♂'s (amice) absent → to be seen in season? (Tg
again in Oct?); habitat large and Hesperomys pop.
seems to be doing well; observed many used
nests, and found 2 adult ♀'s in their nests; they
appear to spend their nights on their backs w/ the
retreat forming a dome over them; when nests in
disturbed they play dead and don't move.

Retr. design:
(chance)



(Slider technique)



↳ Hesperomys collected in low herbaceous veg / grasses
on beachside of dunes, most on E side
of spit area on hard substrate
- inland dune veg w/ many more weeds
than @ Stone Lagoon, although w/
common elements (e.g. verbenas / morning glory)

MCH 00-095

CA: Humboldt Co., Clam

Beach County Park, N 41°00.416' W 124°06.756'

Elev ~ 50' - night collecting

on dunes - *Aptostichus* wandering?
my phrenid ♂, beetles & dandelion

MCH 00-096

CA: Mendocino Co., S Fork Eel

River, N of Flacey, N 39°59.455' W 123°47.470'

Elev ~ 460 ft - gravel bar & river's

edge, ~ fist-sized rocks; very common.

Habrobracon

MCH 00-097

CA: Mendocino Co., Inglenook

Pen State Preserve, Hwy 1 & Ten Mile River

N 39°32.740' W 123°45.693' Elev 0-70 ft

23 June, 00'; Adult ♂ and ♀ *Plamiscus* found in open

dunes before shoreline; most adult ♂'s and ♀'s

appeared early, suggesting that the pop. may be past.

Many juvs located in mid/late afternoon in

association w/ basilisks. (→ many with

located on sand surface, one contained crushed

crusk. + Area up for construction - site may be

stabilized for construction*

MCH 00-098

CA: Plumas Co., Middle Fork

Festiva River & Hwy 89

N 120°37.244' Elev 4390 ft. 24 June, 00'

- *Hamius* ♀/imm collects in limited open sand

on N side of river, W of highway - probably

mostly past. No *Hemiteles* found?? -

top late in season - very hot.

MCH 00-099

CA: Plumas Co., Hwy 70

0.5 mi. N Path 1A N 39°48.413' W 120°29.023'

Elev 4850 ft. 24 June, 00' - *Habrobracon* ♂ ♀

in grass above river bank, Festiva River

MCH 00-100

NV: Washoe Co., Washoe Lake

Dunes, Washoe Lake SP N 39°14.774'

W 119°45.822' Elev 5100 ft. 24 June, 00'

- working system of lake dunes found on East side of

Washoe, in area of system most dunes - areas between

behind dunes w/ sparse → dense grasses + herbs,

some willows / cottonwood near lake providing litter.

Dunes mostly unvegetated, but w/ *Artemisia*, *Artemisia*,

Chrysothamnus on the ridge, less dense on foredunes.

→ collected *Hamius* ♂ ♀ in grass w/ other near trees,

as well as on the top, flies, swarms of open

dunes (29 dunes) } *Hamius*

MCH 00-101

NV: Washoe Co., Nevada
N 38° 55' 06" W 119° 43' 13" Elev 4800'
25 June, 00' - Tutelina ♂♀ on dried
vesicular thistle; Hemerocallis ♂ in
cottonwood / Artemisia litter

MCH 00-102

CA: Alpine Co., Hwy 89, 1/2 mi. W
Monitor Pass N 38° 40' 29" W 119° 37' 722'
Elev 8280 ft. 25 June, 00' HKubzi
exceedingly common (110's collected) - short grass
associated w/ shallow meadows (lakes - 13
HKubzi always H₂O associated?? Hemerocallis
NOT on rocks - PAST??

MCH 00-103

CA: Alpine Co., Hwy 89, vic.
Ebbetts Pass N 38° 32' 61" W 119° 48' 698'
Elev. ~8700-9000 ft 25 June, 00'
- Hemerocallis ♂♀ on rocks / strata /
etc in general vicinity - perhaps
associated more w/ grassy patches,
although all relatively xeric in
nature.

- previous site for Hemerocallis "on talus slope" -
searched decomposed granite south of road,
large talus north of road - none! Best
habitat appears to be along ridge tops -
on ridge south of road - presumably shrub / loose
w/ small rocks - too cold when was found??

MCH 00-104

CA: Mono Co., Mono Lake, near
Tutias N 37° 56' 74" W 119° 05' 13" Elev 4500 ft
6-25-00 - breeding Artemisia + Chrysothamnus
in stony scrub habitat - juv. Hemerocallis
Group

* Hwy 120 from Lee Vining to Benton - lots
of coarse sand substrate, some w/ small
rocks - looks to be excellent Hemerocallis
Group habitat, particularly near
Granite Hills

MCH 00-105

CA: Inyo Co., Ridge North of
Aspendell, off Hwy 168 N 37° 14' 607'
W 118° 36' 443' Elev - 9400 ft 26 June, 00'
- gently-sloping ridge directing north of
Aspendell; exposed decomposed granite on
N-facing ridge line, very sparse - Artemisia
flats to the south - collected Hemerocallis
associated w/ Artemisia in shallow
areas w/ some grasses.

- imm Hemerocallis?? on large rock in
steep rockslide near NE of North Lake -
association perhaps unimportant w/ habitat
preference of Sonchus Pass Hemerocallis??

MCH 00-106 CA: Mono/Tuolumne Co., vic. Sonora Pass, PCT to Leavitt Peak
" N 38° 19.504' W 119° 38.599' S.W.

to 10300 ft 27 June, 00'
- searching most extensively South of pass, on ridges SW leading to Leavitt Peak.
Hkubzi found, although habitat not great, w/ few areas of grass. / size. Many ♀♀ in grassy flats, no ♂♂. ♂♂ found near pine trees in litter / on Atkinsonia - no evidence for hybridization in ♂♂ seen;
good Hkubzi hab much more extensive N of road, vic. trailhead parking lot.

- Hamitrus = Sadler Island Sadler ♂ found on slopes and lower ridges at Mt. Leavitt; male found on ridge of small, med. and large size a few on flat areas at ridges, a few on steep slopes ^{crevices toward steeper slopes} leading to lower ridges to right of peak, most on steeper slopes;

MCH 00-107 CA: San Mateo Co., Año Nuevo State Reserve N 37° 06.993' W 122° 19.866' S.W.

sea level 28 June, 00'
- coastal dune / strand habitat - open dune becoming more limited, not very extensive. Searched from ~ 9 am to 2 pm. weather cloudy, but warmish. found

♂ 4 H. tricoloris associated w/ veg.

00-107

- but habitat good; H. tricoloris on veg, found retreats of Hamitrus in sand, but no specimens.

MCH 00-108 CA: Monterey Co., Moss Landing State Beach N 36° 48.932' W 121° 47.402' E.W. N sea level 28 June, 00' Grass habitat for

Hamitrus; some protected dunes but plenty of habitat to search; sifted for retr. using hands and found many retr. w/ egg sacs / spiderlings, a few w/ adult females, and one w/ adult ♂, this approach seemed to work well; several egg sacs were collected as well as several retr. w/ young juveniles; one retr. contained a shed exoskeleton -> single pers. in shed pupa found in retr.

- too cold for Hamitrus group, but habitat looks good on E side of entrance road, near fresh H₂O.

MCH 00-109

CA: Monterey Co., Point

Sur Lighthouse N36°18.375 W121°53.821

Elev ~ sea level 29 June, 00: No

Amurensis found, several amurensis-like retn. were found

in flat areas near Verbena but 100% of these retn.

contained a wasp pupa or used pupal case. - All were

collected. Habitat did not seem ideal for amurensis -

large-grained sand, many grasses / weeds, dunes

No sign of amurensis retn. were discarded on main

dune system? Only found on smaller dunes near

roadside & veg.

- many adult ♂, some ♀ H. azures (form

like Asilomar) in area of short grass

w/ sparse verbenz, ice plant near base

of Lookout hill, habitat pristine!!

MCH 00-110

CA: San Luis Obispo Co.,

Morro Strand State Beach N35°24.132'

W120°52.061' Elev ~ sea level

29 June, 00 - southern end of SB, just

south of campground; habitat fairly

impacted (foot traffic), much iceplant - some

native Ambrosia, sand verbenz. - very

fine sand - collected ♂ H. azures in

intertidal wet zone / ♂ H. azures on sand near

veg; 3 ♀ H. azures - 2 11 mbbled, 2 11 in

Ambrosia

MCH 00-111

CA: San Luis Obispo Co.,

Pismo Beach, North Beach Campground Area

N35°07.753' W120°38.071' Elev ~ sea level

29-30 June, 00

← N → W

← N → W

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MCH 00-112 CA: Kerns Co., I-5 e Hwy (58)

Butterwillow Exit, NW corner
N 35° 23.990' W 119° 24.087' Elev ~ 300 ft

undescribed Habronattus
("blonde H. hirsutus)
on Atriplex (beat sheet)
roadside

VA: Lee Co., Cumberland Gap NP

MCH 00-113 Cave N 36° 36.576' W 083° 38.76'

vic Skylight 14 July, 2000, coll.
Elev ~ 1400 ft
McHelen - collecting Hypochilus thorelli on
sandstone cliffs at mouth of cave, on
Cumberland Mts escarpment. Spiders very
common in webs in early morning
collected 3 adult ♀♀ / 2 small juveniles / 10
penultimate ♂♂ & ♀♀ individuals (difficult
to distinguish ♂♂ w/ smaller abdomen?)

VA: Lee Co., Cave Springs Rec Area,
off Rd 621, NE of Pennington Gap N 36° 48.089'

W 092° 55.300' Elev ~ 2070' ft? #14-2000 collecting
Hypochilus c mouth of cave w/ spring,
small rock outcrop. Spiders common,
25 mm only for most maturity - collected.
2 adult ♀♀ / 3 smaller juv / 9 penultimate? ♂♂ -
species H. thorelli, but need to det.
- ♀ Mazoe on stick in deciduous litter,
♂ Habronattus? on stone wall / litter.
* (compared on Rd 621 - very nice spot!!)

MCH 00-115 KT: Letcher Co., Hwy 119
 Summit Pine Mt. (Tower Rd.), S of
 Whitesburg N 37° 04.49' W 082° 48.599'
 Elevation ~2600 ft. 6-14-2000
 Sandstone outcrop
 on N.E. side of road, excellent
 habitat. Should be Hypobolus gertschi,
 as Hypobolus is known from "near
 Whitesburg" just to the north?
 Collected 2 adult ♀♀ / 1 small juv / 10
 penultimate ♂♀

MCH 00-116 VA: Buchanan / Dickenson
 county line, Hwy 80, 2 mi. W entrance
 Brecks Interstate SP N 37° 18.074'
 W 82° 17.281' Elevation ~500 meters?
 15 July, 2001 - same site
 collecting additional
 ♀ H. gertschi, collected 5 adult ♀♀.
 Spiders very common at this time,
 mostly large subadults. Found newly-
 molted adult ♂, but did not
 collect.

MCH 00-117 KT: Powell Co., Hwy 77 E NADA
 Tunnel, off Red River Gorge N 37° 49.024'
 W 083° 40.958' Elevation? 15 July, 2001 - large?
 Arachnids in webs on sandstone cliffs

MCH 00-118 KT: Menifee Co., Hwy 77
 Red River, ~3 mi. E NADA Tunnel,
 N 37° 50.026' W 083° 39.316' Elevation
 ~600 ft. 15 July, 2001 - roadside
 deciduous forest w/ opening, understory
 of short herbaceous / perennials. Collected
 ♂♀ Mzeiz (Gadusa?) sweeping, often
 immatures seen. Sweeping close to
 ground.

MCH 00-119 KT: Whitley Co., Hwy 90, ~2 mi.
 E Cumberland Falls State Park, roadside
 pull-off area N 36° 50.846' W 084° 18.495'
 Elevation ~1300 ft. 19 July, 2000
 - collecting Hypobolus thoralli on N side of road.
 sandstone bluffs below road level. - spiders
 common, w/ many adults - collected 6
 ♂, 6 ♀, 211 well-mature (ie not recently
 molted); ♂'s darkly-pigmented). Also 5
 imm. for data. Habronattus coarctatus
 in grassy opening E roadside.

MCH 00-120 TN: Campbell Co., Hwy 25W
(Jellico) I-75 N 36° 34.536'
3 mi. E Jct. W 980 ft 7-19-2000
- collecting above (S) of road, from
spring E - either sandstone bluffs or
large boulders. Hthorelli population
large, but not 25 advanced E KT
(previous) site. Collected 5 adult ♀,
3 ♂ (just-molted), immatures.

MCH 00-121 TN: Morgan Co., Hwy 62,
mi. NW of Coalfield N 36° 03.080'
W 084° 26.336' E 1700
* W / Dustin Wood - collecting on
shale outcrops on W side of road,
far side of stream. Hthorelli
extremely common w/ many adult ♀♀,
large juveniles. However, no ♂♂
seen.

MCH 00-122 TN: Pickett Co., Pickett State
Forest, Hwy 154 E Natural Bridge
N 36° 32.713' W 084° 47.856' E 1770 ft.
7-20-2000 - Hthorelli on sandstone bluffs
N of road - ♀♀ mature, very few ♂♂, those mature
freshly molted in molting webs. Collected 6 ♀, 3 ♂,
Subadults.

MCH 00-123 TN: Cumberland Co., Hwy 70
Ozone Falls State Natural Area
N 35° 52.895' W 084° 48.604' E 1700 ft
7-20-2000 - Hthorelli very common
on sandstone / limestone outcrop below falls -
♂♂ reaching maturity, collected 4
♂♂ all well-mature. Many ♀♀,
subadults.

MCH 00-124 TN: Van Buren Co., Hwy. 30,
1/2 mi. E Spencer, Day Fork Gulf
N 35° 43.912' W 085° 25.927' E 1700'
7-21-2000 - strong gorge S of road
Hthorelli collected, including 4 adult ♂♂,
3 dark, older?? Sample of adult
♀♀, juveniles also taken

MCH 00-125 TN: Blount Co., Hwy 30 E
Energy Mill, W of Pleville N 35° 39.139'
W 085° 11.005' E 1600 ft 7-21-00
- sandstone cap at top of ridge, W of
Sequatchie Valley. Directly E-facing,
fairly open / xeric. ♀♀ reasonably common,
only 1 ♂ collected (soft).
- other scutellids collected - of Neaira, immature
H. viridipus? group seen, not collected. Heterocentrus
common

MCH 00-126 TN: Rhea Co., Hwy 30, ~4 mi. W of Dayton, Walden Ridge N35°31' 786' W 085°02' 970 Elev ~1800 ft. 7-21-00
- sandstone / limestone outcrops on N side of road, fairly xeric, w/ influence from low valley. Hthurelli common, many adult eggs, juveniles. No signs of ♂♂ - probably mature, out-of-wells wandering? (Pop ~ well progressed?)

MCH 00-127 TN: Marion Co., Hwy 27, Suck Creek N35°08' 737' W 085°23' 387' Elev ~1800' 7-21-00 - wonderful sandstone bluffs on south/w side of road, fairly protected / mesic (collected full series of adult ♂♂ (5) - w ♀ (5) Hthurelli plus subadults. Not far from type locality. ♀ Signal mtd.

MCH 00-128 TN: Marion Co., Hwy 108, ~5 mi. NW Whitwell on Cumberland Escarpment N35°14' 380' W 085°30' 736 Elev ~1400 ft. 7-21-00
- Escarpment exposed zone (W) of road very exposed, xeric. more spiders (mostly w/ large boulders below main outcrop. collected 5 adult ♀, 1 ♂ immatures.

MCH 00-129 TN: Grundy Co., Stone Door, Savage Gulf Natural Area N35°28' 795' W 085°39' 353 Elev. 7-22-00
- Hthurelli on massive cliffs surrounding "gulf", many more spiders on large breakdown below main cliffs - collected 5 ♂ / 5 ♀ / immatures.

MCH 00-130 TN: Franklin Co., Carter Cave State NA, n Lost Cave N35°08' 910' W 085°55' 508 Elev ~1200 ft. 7-22-00
♀ Antraxia under rock, Nbarri ♀ / subadults seen in cave, no Hthurelli along cliffs near cave mouth
* stopped @ Sewanee Natural Bridge - excellent sandstone bluff habitat - no Hthurelli??

- weak limestone outcrops E. of ~~Seawanee~~ New Market, AL on Hthurelli seems no Hthurelli seen
- below sandstone bluffs @ Monte Sano SP, very Hthurelli - dry, no Hthurelli
- limited habitat N of Grant, nothing seen

MCH 00-131 AL: Jackson Co, Hwy 35,
NE side of Section City Limit, Sand
Mtn. Escarpment N34°35'732'
W 085°59'883' Elev. ~1200 ft.
7-23-00 - NW-facing escarpment of Sand Mtn.,
above highway. fairly dry, w/ some deeper
overhangs having adult Hthurelli - collected
full series of ♀♀, immatures. no ♂'s
seen.

MCH 00-132 AL: DeKalb Co., Hwy 176,
Little River Falls overlook N34°23'498'
W 085°37'490' Elev ~1200' 7-23-00
- Habronatus coarctatus ♂/♀ collected in sparse
grass / ♀ mutilated

MCH 00-133 AL: DeKalb Co, Little River Canyon
National Preserve, Canyon View Overlook
N34°21'849' W 085°39'593' Elev ~1250 ft.
7-23-00 - wonderful sandstone bluff
habitat on lookout Mtn, Little River
canyon, then forming gorge w/ bluffs.
N-S running stream into Little River w/
E-W facing bluffs - we worked w-feeding
stuff. Good pop of Hthurelli, collected
full series of ♂'s (5), ♀'s (5).
Immatures. ♀ Metzey.02 found on
rock face feeding on Hthurellus.

MCH 00-134 GA: Dade Co., Cloudland Canyon
State Park, hiking trail NW side of Daniel
Creek, of East Rim Campground
N34°50'223' W 085°29'172' Elev ~1850 ft.
7-23-00 Hthurelli common on SE-facing
bluff base, collected 5 adult ♂'s + immatures
Two webs (adult) seen on tree trunk
near rocks

MCH 00-135 AL: Jackson Co., County Road 33,
~6 mi. SE jct. w/ Hwy 79, Crow Mtn.
Escarpment N34°49'012' W 086°01'549'
Elev ~1400 ft. 7-24-00 - collecting on
sandstone cap both E & W of powerline
cut, above county road. Hthurelli
throughout, but more common W of
powerline cut in "breakdown" boulders in
valley core. Collected 5 ♂/5 ♀ / 5 imm.,
some ♂'s soft.

MCH 00-136 AL: Jackson Co., Hwy 73, ~1/4 mi.
S AL/TN border, N end Sand Mtn.,
Nickajack Cove N34°58'823' W 085°36'565'
Elev ~1300' 7-24-00 - sandstone bluff w/
large breakdown above road - Hthurelli common,
collecting 5 adult ♀, immatures, 1 adult ♂

MCH 00-137

TN: Hamilton Co.,

Raccoon Mtn. Valley Caverns N 35° 01.275

W 085° 24.470 Elev. 850' 7-25/26 - 2000

- type locality of Nestans furcata,

collecting w/ B. Dellinger, Steve Pulbecky,

Patty Pulbecky, Cathy Varrell, Jacob ??, + others.

Initial attempt in Janneja Room, site

of large pupa (102 adults, 10 immatures)

seen in May 1999 @ bottom of room

w/ vertical entrances @ top. Very

few animals seen on this trip,

2 immatures only. Room seems

much drier than in May 99, perhaps

seasonal or yearly variation. Not

sure whether this pupa has

crashed ?? or moved ?? Possibility

that animals have moved vertically,

following temperature / moisture

gradient ?? (this is consistent w/ findings

in other parts of cave where most spiders

@ higher levels towards ceilings).

Proceeded from Smug to Great Dome Room

disturb. rope across, no spiders found. Nothing

in transit through stream passage to

KyLight Dome. 4. Sleeping across # 1

Nestans found in SkyLight Dome! - 2 adult

1 ♀ w/ egg sac, 1 ♀ what.

MCH 00-137

KyLight dome moist w/ much surface
litter on floors. Spiders, new ones, mostly

higher, in difficult-to-reach nooks

on lateral edges of rooms, associated

w/ ceiling.

Next day - Bob, Steve, Kelly, Patti, etc.

working Northern part of cave. Nothing

seen in commercial sections, including

near Iguzz Head entrance. Spiders

first seen near Sleeping

far from SkyLight. 3 ♀s w/

egg sac high in rooms @ edges

tending towards room w/ high

splenoid abundance / splenoid nets

(Not in this Room!). Also walked

Surprise & Sticky Dome Rooms, much

interviewing passage, some near

stream. Dome rooms w/ some

side passages w/ good rock,

but nothing seen. Back towards

sleeping across / Great Junction Room,

found ♂ adult in subadult ♀ web,

adult ♀ alone, again @ edges,

high.

Take for trip. 3 adult ♂s (one taken),

4 ♀s w/ egg sac, 2 ♀s adult, 3-4

immatures, all in adjacent rooms

from Great SNT. Room.

N 35° 45' 243' W 085° 12' 443'

(~6 hrs TOTAL)

stated @ 12 noon - 1230 / 330 pm
- cardboard tree-trap experiment. Flzing
10 ft. strips of cardboard (4 inch, 6", 10"),
folded to 5 feet (cardboard sides together,
smooth on tree / outer), on trees w/
1-1.5 meter diameters greater than
5 feet (partial or single wrap, done w/
slight overlap). Cardboard placed on
mature exstn?? Lambek trees don't
flat stream valley of Cosby Loop
nature trail, opposite ATBI setting
126 / horse. Traps placed randomly
(each of 45 numbers chosen @ 1, 2, or 3, correspon
in 4", 6", 8") on trees of correct
size. No obvious microsite differences
(No systematic difference across trees??)

~3 hrs to take down (w/ 3 people)

~3 hrs / 25 traps (10" takes longer to
process - driver??, more
difficult to pull paper
from vegetation)

* Put up on

PULLED DOWN on 9 August, 2000

1 = 4"
2 = 6"
3 = 10"

70 (30)

Array

Costby Experiment

1-2	26-2	scraped	51-1 ✓
2-2 (on ground)	27-1 ✓		52-1 ✓
3-2	28-3 ✓		53-1 ✓
4-1	29-1 ✓		54-1 ✓
5-3 (1/2 on ground, 1/2 hanging)	30-2 ✓		55-3 ✓
6-1 * (COSSE)	31-2 ✓		56-1 ✓
7-1	32-3 ✓		57-3 ✓
8-1	33-1 ✓		58-2 ✓
9-2	34-2 ✓		59-2 ✓
10-2	35-3 ✓		60-3 ✓ (hanging)
11-2	36-3 ✓		61-1 ✓ (hanging)
12-1	37-1 ✓ (hanging)		62-1 ✓ Demargyathus
13-2	38-2 ✓		63-3 ✓ (hanging)
14-2	39-3 ✓ (hanging)		64-1 ✓ Diadaphis
15-2	40-2 ✓		65-2 ✓
16-3	41-3 ✓ (sampled by 24)		66-2 ✓
17-1	42-1 ✓		67-2 ✓ 2 Diadaphis
18-3	43-1 ✓		68-1 ✓
19-1	44-3 ✓ (on ground)		69-3 ✓ back N
20-3	45-2 ✓ 1046		70-2 ✓
21-3	46-3 ✓		71-3 ✓ (Diadaphis)
22-2	47-3 ✓		72-3 ✓
23-1	48-3 ✓		73-2 ✓
24-1	49-3 ✓		74-2 ✓
25-1	50-3 ✓		75-3 ✓

MCH 00-138 TN: Cosby House

Leiodontom ventricosum - w/ tapered abdomen; more so in ♂. Both sexes brick reddish in color, large. ♂'s w/ non-alate pures. Dist woodhills of US, collected at Cosby House

Leiodontom alvicki - smaller bodied than L. ventricosum, w/ light venter. Dist end of tibia II w/ light band, legs otherwise dark.

L. calcar - like L. ventricosum (tan body legs, large), ♂ w/ spur on palpal femur

Leiodontom formosum - collected at night, large dark dorsum, light venter, light palps. ♀'s w/ banded legs, ♂'s w/ dark legs. In emergence during day??

MCH 00-138

TN: Cocke Co., GRSN NP

Cosby ATBI residence house, cf. Cosby Campground (East District Ranger Office)

N 35° 46.67' W 083° 12.808' Elev. ~ 1715 ft. 28 July - w/ James Coken Dolph

- under rocks / litter: Bishoppella - larger tan larva / Theromaster - slightly smaller, darker in coloration / Sabacusa - fragile, small palps

MCH 00-138A

TN: Cocke Co., GRSN NP

via Cosby Trailhead + Nature Loop Trail, N 35° 45.243' W 083° 12.443' Elev. ~ 2000'

- "excrementary ring" in hemlock grove E of ATBI sorting lab / parking lot

(Little River Area)

MCH 00-139

TN: Sevier Co., GRSMNP, Greenline Camp Rd
first bridge N 35° 43.236' W 083° 23.729'
Elev ~ 1600' 29 July, 2000 collecting w/
J. Coker & J. L. Stocks, Skophanic Stocks
- small millipedes on rock bridge / large fluorescent
roadside; *Leiobunum olivaceum* on trees; large
Araneus in high weeds - all collected

AT NIGHT

MCH 00-140 NC: Swain Co., GRSMNP, Big
Creek Picnic Area, just up Big Creek Trail
N 35° 45.072' W 083° 06.573' Elev.
30 July, 2000' - 3 log litter, 3 moss
samples; *Leiobunum* from outhouse

MCH 00-141 NC: TN STATE LINE, off

Hwy 32, GRSMNP, south on
Appalachian Trail ~ 1/4 mile
N 35° 46.228' W 083° 06.673' Elev ~ 2000 ft
30 July, 2000' - trail runs just below small
ridge top of mostly pine. In fallen pine
logs collected *Fumitoma* deprehensum,
3 adults, 1 large immature, 1 small
immature. Animals preferring dryish
decomposing interior of logs, dark
reddish in color - fairly dry, microhabitat?
Theromaster under rocks, logs, litter

MCH 00-142 NC: Swain Co., GRSMNP

Climbing mounds, Dine Parking Lot N 35° 33.378'
W 083° 29.711' Elev ~ 6400 ft 7-31-00
- *Nelima* deep under large rocks along trail to Andrews
Bald; *Odiellus* under rock on top of large rock w/
mosses - drying forest above lot.
MCH 00-143 TN: Sevier Co., GRSMNP, Hwy 441 E
Chimney Tops trailhead, boulder field on E side of
road N 35° 38.183' W 083° 28.255' Elev ~ 3500 ft
7-31-00 - 5-finger boulder field above road,
extensive, deep, moist. *Nesticus* common under
rocks; *Bischopeella* w/ *Nesticus*, clinging to
underside of relatively shallow, but large, rocks,
Silvican carolinensis under deeper rocks, but
w/ large spaces. *Leiobunum politum* on veg.

MCH 00-144 TN: Sevier Co., GRSMNP, Elkhardt Area,
Little River / Jones Creek Trailhead N 35° 39.215'
W 083° 34.811' Elev ~ 2200 ft 7-31-00
- open-flowered forest of large deciduous trees in flats,
adjacent to Little River; *Fumitoma* under rock in logs;
Theromaster in litter; *Bischopeella* under rocks;
Odiellus on veg; *Hydrobates* on forest
floor in dry litter + under stuff;
Heggenbergiana sifted from litter;
Leiobunum spp on floor / veg

MCH 00-145

TN: Cocke Co., GSMNP, Trail

from Cosby to Low Gap, Elevations

~2000' to 4300' (Low Gap ~ 35° 44.244' N 083° 10.877' W)

1 August, 2000' - Odiellus ♂ (lighter, long-legged)
♀ (bigger, darker, shorter-legged) on trailside veg
in sunny, open areas. Nestius, Sabrom
common under trailside rocks, very
shallow. Phrynosoma much less common.

Hypoclinus pascuensis ♂ ♀ under rock overhang
(both adult). Nestius less common in fields??

MCH 00-146

TN: Cocke Co., GSMNP, Trail

from Low Gap to Mt. Cammerer, Elevations

~4300' to ~5000 ft. (Mt. Cammerer = N 35° 45.790' W 083° 09.710')

1 August, 2000
- Sabrom under logs/rocks, finding shells; Nestius
under rocks on N-slope; Phrynosoma in valley
in rotten log, sitting on veg
in sunny spots (low bushes, including
Lobelia) were Odiellus (subadults?)

MCH 00-147

TN: Blount Co., Rich mtns. Blount hole /

Grill Cave / Cult Cave Area N 35° 38.650' W 083° 48.309' E

2 August, 2000

GSMNP W of Townsend

to Blount Blount hole

to Blount Blount hole

to Blount Blount hole

to Blount Blount hole

to Blount Blount hole

to Blount Blount hole

Hypoclinus on surface in vic, + Nestius.

Nestius collected in CAFE, twilight. Cocke
also collected from in AMB. Nestius,
Nestius in Bull.

MCH 00-148

TN: Sevier Co., Wear Cove,
road N of Mitchell Bottoms Fossil Area,
E on Hwy 321, S on Roberson Rd., E
on Coulmont Rd, straight on Mt. Hope, Rd.
S on Valley Lane, S on J.L. Mayers Rd.

MYHR Cave, of 35° 42.970' N
083° 36.981' W ELEV ~ 1800 ft.

- cave at SE corner of Wear Cove,
just at border of GSMNP? Accessed
by turning W on dirt road ~ 1/2 mi
up Myers Rd, then ~ 1/2 mile on
dirt road. Cave is below road, just
above a farm pond, below limestone
outcrop. Cave small, leading to small
stream passage. Collected Nestius
in webs just beyond twilight - Spiders
common collected 4 eggsac, other eggs,
p.p. Saw 20 ft ♂, but could not
collect. Hypoclinus pascuensis common in
Venture above cave entrance.

[MCH 00-151]

- along road associated w/ powerline cut - dry habitat. JAMES collected either *Thomomys* or *Phalangeres*? under wet shale - no other seeds? *leiodontum* on veg. * site just S of Tiber Creek site of F. Coyle

[MCH 00-152] TN: Sevier Co., GSMNP, Greenbrier Cove, near confluence of Middle Pigeon / Pigeon Creek, up Grassyard Ridge Trail, ~ 100 meters N of cemetery N 35° 42' 42.4" W 083° 22' 9.86" E ~ 2100 ft. 5 August, 2000 - collecting near type locality of *Thomomys deppeianus* (SHEAR) (x "mouth of Pigeon Creek")

- similar to 00-141 situation, found 3 adult, 2 immature *Thomomys* in dryish interior of downed log. Perfect logs lie on slope (for drainage?), ~ 1/2 decomposed (1/2 original height), w/ moss covering red interior that is somewhat dry w/ spaces for animal movement?? Adults found in interior clinging to wood surfaces.

[MCH 00-149] TN: Sevier / Cocke Cos., GSMNP, Middlebrook Bldg Trail to Albright Grove 3 Aug, 2000 - walked trail to start of Grove loop, collected litter for *Beulose* from fungi, live bark, dead logs, mosses, birds' nest (in cabin); *leiodontum*, *Odiellus* on veg along trail; little under rocks

[MCH 00-150] TN: Sevier Co., GSMNP, Cades Cove, just past N turnoff to Rich Mt. vic. Tater Branch N 35° 36' 50.3" W 083° 40' 51.4" E ~ 1800 ft. 4 Aug, 2000 - open pine / oak woodland at meadow's edge, thick leaf litter w/ downed logs. Collected *Habrobracon*, *leiodontum nigropalpis*? under stuff / debris (loose) lying on litter. Not much under stuff. Reasonably xeric.

[MCH 00-151] TN: Blount Co., Hwy 129, vic loop just E of Calderwood Rd., N towards GSMNP, powerline cut N 35° 30' 58.0" W 083° 59' 19.1" E ~ 1400' 8-4-2000 > collected *Vonones* sp. under larger rocks in ravine bottom, loose (not embedded), but probably under H₂O earlier in day?? collected 4 immatures, saw no others in various habitats - very unusual?? Found *Vagantia carolinensis* under loose shale / in leaf litter

[MCH 00-153] NC: Swain Co., GSMNP,
Heintzga Overlook N 35° 34.392',
W 083° 10.816 Elevation ~ 5350 ft.
6 August, 2000: ~ high-elevation spruce/
hemlock?? hilltop / N-facing slope -
collected *Helinus*, *Odiellus*, *Leibonium* on
veg / buildings. Took litter samples.

[MCH 00-154] NC: Swain Co., Patterson
Valley + Bog 35° 08.82N, 83° 01.43W
Elev 3500-4300 ft. 7 August, 2000 - collecting
w/ 2000 spider class, led by F. Gyle &
W. Shere. Bog developed in basin,
edges consisting of escarpment rock
exposures (schists??) bottom of
bog area very sandy w/ slow
meandering streams. Collected immature
Maeziz (incubated??), *Habronattus*
coarctatus ♂. Should be excellent
site for other *Habronattus* species
(associated w/ outcrops, on
sandy soils), perhaps at
other times of the year?

[MCH 00-155] CA: San Diego Co., Jewell
Silver Strand SP, N 32° 36.531',
W 117° 08.038' Elevation ~ sea level
10 Sept, 2000: collecting w/ M. Lowder,
western dunes, 70°-80°F, ~ perfect
- at South border, just W of Northern border at
New Institution - 5 immature ♀♀ *Hustakia* sp.
collected on open sand, either in flats
between dunes, or associated w/ small
openings in dunes stabilized w/
iceplant.

[MCH 00-156] CA: San Diego Co., ANZA-
Burrego Desert State Park, ~ 1/4 mi.
N Hayden Spring N 32° 42.627',
W 116° 07.023' Elevation ~ 3900 ft. 14-15 October, 2000
(* see also MCH 99-046)
- large desert wash habitat w/ adjacent sparse dune.
Roosting in wash poplar, most success at small,
globular perennial composite, purple/pink flowers
(most not in flower). Other shrubs
included *Hydrocotyle*, *Petalonyx* - collected 2♂/3♀
Hesperis, ♂ imm ♀ *Synagrella*, *Electronid*?
- working dunes, found many adult ♂ *Aptostichus* sp.
moulted at night; burrows of ♀, ♂, juveniles
uncovered in sand at base of dunes,
new vegetation (yucca). More?? on N-facing
side of dunes → very common!

751-00 H2M

CA: Imperial Co., 1/2 mi. S

junction Hwy 111 and I-8, 32° 46' 03" N
150 30' 109" W Elev. ~ sea level

29 October, 2000' coll w/ J. Skejic, B. Lank, D. Wood - M. Lowder - sparse grasses at roadside, impacted; collected few (2 each) imm (including po
31/10 4436-1-

$$mC4 \text{ } 00.158$$

Impertre Co., Algodones

Dunes, N Glam's ~ 2.5 mi. N Mammoth Wash
open Area Rd N 2200 ~

Elev ~ 320 ft, 10-29-00 WZ (Kd) West into
 edge dunes from road at railroad track.

Very little happening on creosote / Attraplex
in wzsles. Adult thomisids on dominizels,
yellow-flowered dune scrub (??).

400-159 CA:

penitence Co., Hwy 78, W side

Almonds Dunes, 2.4 mi. E jct. East Highland CANAL
N 32° 58' 72"

10-29-00. Good sand diversity along road, better closer to canal. Found $W11515.507'$ $Elw \sim 260ft$ $W211515.507'$ $Elw \sim 260ft$

♂♀ Hsigrads on Dalea, none? on Atriplex? craft
Diguetia in web retreats on Atriplex, reasonably common (0.14/1000) L. 2nd inst.

09-08-16

UC# 00-160
Southern end
N 30° 10' - 20'

CA: Imperial Co., Heber Dunes
Heber Rd. E of Hwy 111

N 32° 42' 627 W 115° 23.659 Elev. ~ 55 ft
10-29-00 - edge habitat dominated by
large Arizplex, also creosote, tamarisk,
groomweed internally (as on dunes)

191.00 H2W

MCH 02.161 CA: SAN BERNARDINO Co. 1.2 mi.

N Hwy 62, on Chadwick Rd., N 34° 08' 50.8"
W 115° 46' 07.6" Elev. 1235 ft. 12 Nov, 2000
w/ M. Lander, A Hanel, L. Fajardo - very nice

sand wash / stabilized dune habitat, Atriplex dominants,
sparse lavaya, some "soft" Peranthemus. Nice
day, but cold previous week. Found lots Hesperis, Lifzindo
collected on ground ?? Many Peranthemus best w/out
success ?? -> should be here? too cold ?? too late ??
Many adult ~~egg~~ Ego taken from Atriplex

MCH 00-162 CA: San Bernardino Co., Hwy 62,
 ~1/2 mi N on Shelton Rd (W of Old Dale)
 34007.57' N 115057.749' W Elev. 421 m
 - see also MCH 00-023 12 Nov., 2000
 Wash w/ Parrotulinas, Hymenolera, A. demissa just above
 on broken ground. Collected 1 ♀, 2 imm. H₂ samples
 from Phacothanas / Ambrosia. Aztec
 NOT very common in excellent habitat →
 could previous week, perhaps too late
 in season ??

MCH 00-163 CA: Riverside Co., N of Palm Springs, Indian Ave, 1.4 mi. N of Jct w/ Hwy 111
 N 33° 52' 23" W 116° 32' 31"
 Elev. ~ 600 ft. 12 Nov. 2000
 (Via San Rafael) Hardpan, wide washout below Whitewater River.
 collecting in disturbed area - lots of stiff *Parthenococcus*, some *P. schottii*? also *Hymenococcus*, *Ambrosia* - collected 2 imm. *H. signatus* in *Parthenococcus*, but 12te in PM, getting cold.
 Better-looking habitat to the NW, dunes just south of I-10

MCH 00-164 CA: San Diego Co., N end of Imperial Beach, ~ 1/2 mi. N YMCA Camp, W of Naval Radio Receiving Facility N 32° 36' W 117° 08' Elev. ~ sea level 19 Nov, 2000
 see also **MCH 00-155** - atypically warm for late Nov, ~ high 70's, no breeze. collecting in *Sarcobatus*, just W (~ 10 yards) of fence, dunes w/ *Ambrosia*? iceplant, verbena, slightly impacted. *Habenarthrus ustulatus* (dune form) fairly common on open sand (small gravel) near veg, often on smaller dunelets (rarely in open flats). Found several adult ♂, adult ♀, fewer immature

MCH 00-164 Observed ♂/♀ courtship
 both sexes on small *Ambrosia* upright stalks, 5-6 cm apart. Both sexes w/ rapid flickering of front legs, raised 2nd separated from body.
 ~ "standard" *Habenarthrus* courtship.
 both sexes signalling important. Interesting that animals are using structures while courting.



MCH 00-165 AZ: Maricopa Co. E of Gila Bend off Maricopa Rd., Butterfield Trail South edge of Maricopa Wildlands N 33° 01' 57" W 112° 29' 36" Elev. ~ 600 ft. 24-25 Nov, 2000
 - saguaro creosote / cholla sandy / gravel flats, adjacent to rocky volcanic hills / bajadas. - collected adult ♀ *Habenarthrus* under large rock in loose sand wash, rock loose on ground, not imbedded; immature *Habenarthrus* in similar situations. Many adult ♂ (~ 10), 1 adult ♀ *Habenarthrus* *ustulatus* on small rocks on level plains → not on rocks in sandy washes ??
 not on rocky bajadas or hillside dunelets. Weather good mid-70's much sun.
 x see ALSO **(97-058)** at **(96-089)**

[MCH 00-166] CA: San Diego Co., ANZA Borrego
SP, Hwy 78, 1.7 mi. W jct w/ Hwy 53
N

3 December, 2000 - collected ♂ Hesperatus
from small Ambrosia, general habitat
SAND WASH w/ creosote, teddy b cholla,
Psoralea spirosa / schottii, Ambrosia.
Also saw small immature Hesperatus?
in small rock in flats??

[MCH 00-167] CA: Imperial Co., San
Sebastian Marsh NA (San Felipe Creek)
N 33° 08' W 115° 53' 54" Elev -80° feet
3 Dec 2000 - collected ♂ / ♀ eggs
Pardosa? on wet ground w/ Sua? (reeds),
♂ Skotoda on clay flats, many ♂♂
Hypnithrix in wet saltgrass (Distichlis)?
single p ♂ Htrauselis in drier saltgrass
saltgrass hib very limited on edges of
in prime / perennial wetland, but perhaps
more elsewhere in marsh??

[MCH 00-168] CA: San Diego Co., AB SP,
JNT Hwy 78 / 53 Yagui Well Camp Wash
N 33° 08' 20" S W 116° 22' 75" Elev 1460'
3 Dec, 2000 - subadult Homalonychus under
rock in WASH (Psoralea / mesquite)

[MCH 00-169] CA: San Diego Co., N-Ko-Poh Co.
Park Rd., ~1/2 mi. NE 1-B Exit, N-side in
wash 32° 39' 172" N W 116° 06' 109" W Elev ~960m
12-9-00 - collecting in same wash as
original N-Ko-Poh collection - collected
2 adult ♀ / 6 ♂ adults Htrauselis mostly on small
rocks in trees just above level of
wash / adjacent. Temp fairly cool
(upper 60's??)

[MCH 00-170] CA: San Diego Co., El Monte
County Park N 32° 53' 400" W 116° 50' 905"
Elev. ~1500' ft. 16 December, 2000
- collecting at edge of grass ball field, N side
of road opposite park. In intermittent, dry
grass w/ sandy soil. Collected ♂ / ♀ /
imm. Htrauselis tarsalis adult ♂
H. pyrrithrix in denser grass.

[MCH 01-001] CA: San Diego Co., SE Delmar, S of
J.E. Clews Horse Ranch / Pinnacle Q Canal Creek
N 32° 56' 064" W 117° 13' 451" Elev ~200' 1-9-01
- collecting on mesa edge, sand accretion + small rocks / pebbles,
in channel barrens, along ridgelines. Many ♂♂
adult Htrauselis, subadult ♀♀, most on small rocks,
some on ground. Best SW-facing, warmer, ~
65° F?

MCH 00-171 CA: San Diego Co., of Poway,
Blue Sky Ecological Reserve
N 33° 00.93' W 117° 00.822' Elev. ~700 ft. 12-30-00 - lycosids
in riparian zone, very common on large
downed sycamore leaves; often stuff
under objects

MCH 00-172 CA: San Diego Co.,
Poway, Lake Poway Spillway
N 33° 00.545' W 117° 00.532' Elev. ~1000 ft
12-30-00 2♂ Hymenitrix collected
in sparse grasses near lakeside,
& Helophorus on sticks in willow litter,
lakeside

see 00-001 on previous page

MCH 01-002 CA: Imperial Co., Hwy
I-8 @ Mountain Springs Road Exit,
~ 1 m. SW of Southside junction
N 32° 40.348' W 116° 05.913' Elev. ~700
meters, 13 JAN, 01 ~ desert chaparral,
granite boulder piles, veg w/ agave,
yucca, barrel cactus, Encelia, Acotillo,
juniper, Ambrosia, etc. Visiting after
recent storms, habitat fairly moist.

MCH 01-002 - imm Homonidius under
stone in small DG wash; occasional
millipede under rocks, same situation;
2 Gilistatid & similar situation, building
"funnel" webs coming out from under
rocks. Pelipetrid epiliones fairly
common under rocks, mostly
subadult, few adults (strong
leg banding, colorful). Definitely
clumped (aggregated), finding several
individuals when finding one.
Preference for loose (eg disturbed)
rocks - several found in association
w/ old firepits. Out wandering
after rains?? - 2 adults also
collected on 1-14-01.

MCH 01-003 CA: San Diego Co.,
Anza Borrego Desert State Park, vic.
Mountain Palm Springs trailhead,
N 32° 51.754' W 116° 13.133' ~300 meters
14 JAN, 01 w/ M. Lowder.
- on trail from trailhead to Pygmy Grove
to Southwest Grove to Palm Bowl Grove
to Surprise Canyon Grove → back.
- very dry on surrounding hillsides, palm groves
w/ scattered soft grass, mesquite, Atriplex

MCH 01-003

Collected several *Hemelenychus* (part others immature) all under rocks in sandy wash - large, flat loose rocks best. Better habitat below parking lot in large wash?? 1 individual on rock, others on ground; 1 large ♀ felicitated w/ egg size under rock in DG open wash; light banded lycosids under rocks in wash - ♂♀ *Harselis* collected in Surprise Canyon Grove, in Distichlis + palm litter + *Atriplex* - Other ♀ *Hebranzhus* (*Chrysothrix*??) in same habitat. Perhaps more habitat in Pygmy Grove - Excellent weather! ~70°, sunny.

MCH 01-005

Mex: B.C.N.; at Ensenada, Playa South of city, W of Hwy 1 1 mi. N El Salin Mtn N 31°49.05' W 116°36.53', Elev ~ sea level 1-23-01 w/ M. Louder - stabilized dune fields, mostly degraded, some small areas relatively intact, w/ native vegetation. Perfect weather, ~70°F, sunny. No *Hustulatus* found, no retreats; collected ♂♂ *Olios*?; ♀ (*Gnathopis*?) →

MCH 01-006

Mex: B.C.N.; ROAD TO LA BAFADORA, E. PUNTA BANDA, side ROAD to E. E. CANTU, N 31°42.969' W 116°40.421', Elev ~100 ft 1-23-01 - in chaparral (*Alnus*?) habitats just SW of E. Punta Banda, open, rocky barrens on minor ridge edges, slopes - some eroded substrate? *Hustulatus* very common basking on small pebbles - part not mature yet? mostly subadult ♀♀, ♂♂ (warm enough, full sun, early AM). 2 Adult ♂♂ w/ black head, ten abdomen, NOT unlike in-ko-Pish. Other places searched - looking for *Hustulatus* on dunes

- sand spit N of Punta Banda (access limited due to private residences) - some habitat ~ pristine, no spiders - 32°05.524' N 116°52.935' - mouth of Arroyo Descondido Hwy 1 ~ 10 km? S of Cantamar (locality 29 of Cooper); hab severely limited/impacted - no spiders - N 32°12.506' W 116°54.895' - CANTAMAR DUNES, ~1 km S Cantamar, off Hwy 1 (DESCANSO, local 28 of Cooper). Much impacted, but w/ some reasonable microspots - no spiders

MCH 01-004

SAME LOCALITY AS 01-003 1-21-01 → collected ♂ *Hustulatus* in palm litter; ♀ gnathopisid, ♂ plectruid under rocks in sandy areas

MCH 01.007 CA: Imperial Co., Sidewinder Road,
 ~5 mi. NW I-B, vic. Pasadena Mtn. of
 Cargo Mts. N32°47.25'
 W114°45.793 Elev. 420 ft 3-7-01
 habitat - desert pavement w/ fingers of sandy wash,
 coming from base of basalt/granite hills. veg
 - ocotillo/mesquite/cholla/opuntia/Ambrósia/
 Encelia ^{peruviana} collected Eurybunus (Palpatars), mostly
 ~adult, under rocks/damaged Ocotillo, more
 common towards hill / on hill. Much rain
 in recent past * ♂♂ scorpions (rock-dwellers)
 under stuff towards hill. Adult ♂
 boxosoles, adult ♂ clubmound? ()
 ♀ philodromid under damaged Ocotillo, ♂♂
 gnaphosids.

looking specifically for Homalonychus
 scorpiones → 2 sites known W of Colorado River
 in 3 ne nearby (Gilby, Pico). Found adult
 ♀ under damaged, rotten ocotillo / subadult ♀
 under rock on hillside (not study). Much recent
 rain making searching difficult.
 - ♂♂ Helconothrips utahensis found on small pebble,
 more study than present. Very unexpected
 finding.

↳ collecting v. ♂♂. Crows

MCH 01.008 CA: Imperial Co., Sidewinder Rd.,
 11 mi N I-B N32°45'739 114°44.958
 SW 380 ft 3-7-01 ♂ caponiid (Tarsomops)
 fresh in sandy wash (old fig - clinging, no
 web). Also found old egg case w/ spider's
 under large board → looks like Homalonychus
 (MCH 01.009) CA: Imperial Co., ~1/2 mi. E Ocotillo
 in fringe rd. N32°44.918 W115°58.989
 Elev ~300' ft. 3-7-01
 - looking under trash associated w/ old palm/
 jojoba grove. Found 4 adult ♀ Homalonychus
 theolagus under boards/etc. - Also
 gnaphosids, pholids

MCH 01.010 CA: Imperial Co., ~1 mi S Ocotillo, Hwy 52
 N32°44 W115°58 Elev ~300' ft
 3-7-01
 - roadside upper bajada habitat, ocotillo, creosote,
 Ambrosia, Atriplex dominating - sandy/
 gravel soils - road
 pholids commonly () fewer spp.
 1 adult ♀ Homalonychus, 1 philodromid
 under rock.

MCH 01.011 CA: Imperial Co., Chick Rd
 E Hwy 11 32°46.034' N 115°30.109' W
 Elev. ~ Sea level 10 March, 2001
 - collecting w/ Dustin Woods
 - adult ♀, 2 imm in roadside grass -
 windy, coolish

MCH 01.012 CA: Imperial Co., E of Winterhaven,
 Levee Rd., ~ 6 mi. E, N of Yuma Casino, W
 of Sand Island N 32°45.958' W 114°32.040'
 Elev ~ 70 ft. 3-10-01
 - field site grasses + cottonwood litter → ♂ Hermosus,
 ♀/imm *Hesperis*, imm *Hesperis*?

MCH 01.013 AZ: Yuma Co., Fortuna Wash, S of
 Plainsville N 32°41.988' W 114°25.493' 3-10-01
 Elev ~ 200' ft. - desert wash, *Hesperis* /
Reio Verde / *Tamarisk* / - creosote on sandy plain
 to west → *Hemilongus* subadults (2) under
 rocks at night / camel cricket under rocks
 in rocky area / many *terebinids* →
 being sp on SAND

MCH 01.014 AZ: Yuma Co., N end of Mohawk Dunes,
 ~ 10 mi. E TACNA EXPT on dirt freight Rd
 N 32°41.619' W 117°47.100' Elev 500-ft
 3-11-01 - stabilized dunes - *Ambrosia dumosa*, *Gutierrezia*
 dominant / creosote on SW corner 12-14

MCH 01.014 6/9/10 *Hesperis*, all beaten from
Ambrosia dumosa → none in places where substrate
 was sand. Other beetles / *Metzgeria*

MCH 01.015 AZ: Yuma Co., I-B C TACNA EXPT,
 ~ 1/4 mi. S W TACNA Rd N 32°41.307' W 113°57.204'
 Elev 400 ft 3-11-01 - *Hemilongus* under
 debris along road - 1 ♂, 1 imm ♀ (stayed
 in tire - not ground)

MCH 01.016 AZ: Yuma Co., Dome Valley, Gila River,
 vic Good 10th / Ave 22 Int. N 32°41.466'
 W 114°14.664' Elev ~ 270 ft 3-11-01
 - 8/29 *Hesperis* collected in *Hesperis*, *Shallow*
 gravel leading to Gila River - disturbed.
 * BERNER HABITAT ~ 4 mi. E Hwy 95 on Ave 22E

MCH 01.017 AZ: YUMA Co., Kofa NWR, King Rd,
 ~ 3 mi. SE Hwy 95 N 33°14.944' W 114°2.925'
 Elev ~ 1700 ft 3-11-01 ♂ ♀ *gryllus* under
 small balled rock on creosote / plant parent
 (lost; ♀ had just mated & have been
 made guarding @ penultimate?)

10-5 yellows / Overstate TEXACO

MCH 01-018 AZ: La Paz Co., Plumas Mtns, just SE of Bouse / Quartzsite Rd
N 33° 46.891 W 114° 05.583 Elev ~1300'
3-11-01 - scorpions (Vesperugo?) under rocks, Eurybatus under rocks (daylight), several wandering at night (dry wash - peloterich / ironwood) - much recent rain, pos Homalonychus on top of rock, water in night

MCH 01-019 AZ: La Paz Co., Hwy 72, 6.0 mi. E jct w/ Hwy 95 - sand dunes on N side of Rd. N 33° 59.632' W 114° 06.076'
Elev ~760 ft 3-12-01
~ stabilized dunes w/ A. dumosa, scattered Ephedra, grasses, creosote / ocotillo in intervening flats - called 79 / 100 Hsigrutus, all hard beatad from A. dumosa; also Xysticus, Theridion? pos Homalonychus under debris in flats

MCH 01-020 AZ: La Paz Co., Bill Williams River Nw 1/4 N 34° 16.188' W 114° 02.811 Elev ~650 ft 3-12-01 - riparian corridor w/ cottonwood, willows, flowering H₂O - seemingly excellent sparse grass / sandy soil microhab - No Hsigrutus (weather good). Collected 1 Mcleopods ♂♀, Hsigrutus ♀ on willow litter (H. formosus)

MCH 01-021 AZ: Mohave Co., Havasu City, Acoma Blvd. N 34° 27.127 W 114° 17.847 Elev ~700 ft 3-12-01 - smoke tree / Hymenoclea wash subadult ♂ Hsigrutus from Hymenoclea / pos Lycostid under rock

MCH 01-022 AZ: Mohave Co., Southern tip Havasu Nw 1/4 off London Bridge, dunes N 34° 32.086' W 114° 22.417' Elev ~580 ft 3-12-01
- sand accumulations (active) on NE trending hills, sand at southern end - beztine, Ambrosia dumosa
- 7 Hsigrutus ♀, some older (popr past? - no ♂s?); several ♀ phidomids (Eba) / ♀ sand watch / Theridion → dunes impacted

MCH 01-023 AZ: Mohave Co., Mohave Mtns, Cy NW of Blacksmith NE side, vic spring N 34° 35.901' W 114° 11.171' Elev 2570 ft 3-12-01
- wash veg = pelouderpaste, Hymenoclea, mesquite, Lycium, Ephedra hillsides = ocotillo, cholla, creosote, Encelia, Ambrosia
- 2 epilionids collected, one large (= Eurybatus?) under rocks by day, other small, no striping → most at night 0 OATMEAL TRAIL - Many Monalonychus under rocks, not particularly sandy, but in wash bottom.

MCH 01.024

AZ: Mohave Co., Fort Mojave
Indian Res., just Vanduse / Courtwright Ponds
N 34° 51.985' W 114° 33' 7.15' SW 500 ft
3-13-01 - roadside grass ♂ Harselis

MCH 01.025

CA: San Bernardino Co., Needles,
of Needles GC, along Colorado River
N 34° 50.795' W 114° 36.076' SW 500 ft
3-13-01 - sparse grass & riverside, collected
adult ♂ Harselis, imm Harselis; ♂ Harselis
towards Arrowweed.

MCH 01.026

CA: San Bernardino Co., East Mojave NSA,
off Lanfair Rd., Vantage Hills. N 35° 04' 116'
W 115° 09.785' SW 3700 ft. 3-13-01
- granitic hills in desert upland → Hemilongchus
under embedded granite rock

MCH 01.027

CA: SB Co., Vantage Valley, Nipton
Rd. ~ 3 mi. E jct. w/ Vantage Rd. 3-13-01
N 35° 27.457' W 115° 20.738' SW 2700 ft.
- imm ♀ / ♂ Hsodszlei in Atriplex - bottom
of valley, silty soils

MCH 01.028

CA: SB Co., Vantage Valley, Nipton Rd.,
0.5 mi. E jct w/ Vantage Rd. N 35° 27.590' 3-13-01
W 115° 22.649' SW 2601 ft. - Above 1st site,
tending towards creosote stands which flank
bottom of valley - Ambrassia dumosa on
sandy soils associated w/ antennaria wislizeni

MCH 01.029

- Collected adult ♂, several ♀♀
Hsodszlei, most in small area,
although other sandy spots appear
equivocal. Not further down
towards valley floor because of
substrate issue ?? / on all Atriplex??

MCH 01.029

CA: San Bernardino Co., Mesquite
Valley Dunes N 35° 43.819 W 115° 33.560'
SW ~ 2600 ft. 3-14-01 - ♀ southern end
of valley, south of town of Sandy, good zettive
as dunes w/ Atriplex - 2 adult ♂, several adult
♀ Hsodszlei - very pretty on dunes, some
plants - some nitration w/out spiders?

MCH 01.030

CA: SB Co., Mesquite Valley, just
Cherokee / Amber Rds. N 35° 46.141' W 115° 41.206'
SW 2650 ft 3-14-01 - hexosecles
under boards

MCH 01.031

CA: SB Co., Kingman Rd., E of Winters
DAS, N 35° 43.290' W 115° 41.206'
SW ~ 3200 ft 3-14-01 - wash - yucca, Joshua
tree, creosote, cholla - Hemilongchus
under rocks, not sandy, more gravelly

MCH 01.032

CA: Inyo Co., Smith Talc Road N of Kingston Range, 5.1 mi to 'Broken' N35°47'37" W115°59'13" Elev. 3250 ft 3-14-01

creosote / *Ambrosia dumosa* / *Hymenoclea* scrub greyish gravel / sw, fairly fine, large boulders in wash - collected several subsoil *Hamamelis* under rocks in wash / *σ capensis* / *σ plectenoid*? Saw nit; immature *H. ustulata* in soil / pebble flats in wash bottom, sandier siliceous

MCH 01.033

CA: San Bernardino Co., Little Dunsmuir Dunes, off Hwy 127 N35°40'046" W116°17'335" Elev ~ 4500 ft 3-14-01

- *Atriplex* / *Ambrosia dumosa* flats associated w/ low washes, Amargosa River floodplain on northern edge of Little Dunes ORV area. we hand-beat many *Atriplex* w/out success, in same area 25 *Ambrosia* - Working on smaller *Ambrosia* collected 5 sublt & *Hymenoclea*!! Interesting shift in plant preference??

MCH 01-034

CA: Inyo Co., Death Valley NP, Furnace Creek Golf Course N36°27'569" W116°5'925" Elev ~ 70 ft 3-15-01

σ Hymenoclea / *σ* *Hymenoclea* in exotic grasses associated w/ palm grove next to GC - salt grass (*Distichlis*) habitat at bottom of valley, surrounding salt pan. *σ* & *Hymenoclea* low in grass, zone moving between grass clumps. Very salty ground; 20 *Hymenoclea* on juniper stems

MCH 01-035

CA: Inyo Co., DVNP, Hwy 190, 11.5 mi S of JCT w/ Hwy 374 N36°32'077" W116°52'992" Elev ~ 150 ft 3-15-01

- salt grass (*Distichlis*) habitat at bottom of valley, surrounding salt pan. *σ* & *Hymenoclea* low in grass, zone moving between grass clumps. Very salty ground; 20 *Hymenoclea* on juniper stems

MCH 01-036

CA: Inyo Co., DVNP, ~ Panamint Valley Dunes N36°26'449" W117°26'242" Elev. 1850 ft. 3-15-01

- trailhead (end of road) on rocky boulders, perhaps 3 mi? SE of dunes proper. Found small salt opilions under rocks & parking. Proceeded to hike towards dunes, finding *Hymenoclea* (20, 48, in) on *A. dumosa* in sandy flats / washes w/ creosote. Almost pure creosote is one news dune field, most spiders collected ~ 3/4 of way here. *Stenobothrus* pairs under rocks, + plectenoid? No *Hamamelis* under many rocks turned??

(MCH 01-037) CA: Inyo Co., DVNP, MONTA
OF MARBLE CYN, ~ 9 mi. NW of
Stovepipe Wells CG N36°38.721'
W 117°09.009' Elev ~ 900 ft. 3-15-01
- very dry wash / adjacent desert hills -
w/ scattered creosote / Atriplex hymenelytra
- large Eurychorda? very common, starting
to wend at dusk. Detrend trail w/ many
adult ♂♂ / ♀♀ - collected ~ 15 individuals.
A (20 ♂♂ + ♀♀) Syrrhaptes on
ground / ♀

(MCH 01-038) CA: Inyo Co., DVNP, ~ 1/2 mi.
NW Stovepipe Wells CG N36°36.423
W 117°09.173 Elev ~ sea level
3-16-01 - Atriplex + creosote on low sandy
plain / small dunes. collected Elev, 20729,
imm Hesperis - band / beating Atriplex,
common

(MCH 01-039) NV: Nye Co., ~ 1 mi. N/NE Beatty
off Hwy 95, along Amargosa River
N36°53'369 W116°44.961 Elev ~ 3400 ft
3-16-01

- cottonwood gallery (small trees), shrub / yucca
wash soil, short grasses / Chrysothamnus / Sarcobatus

(MCH 01-039) Single adult ♂♀, many perennates
collected on higher ground w/ cottonwood
bed litter - also on riparian edge going
towards rabbitbrush flat

(MCH 01-040) NV: Nye Co., Hwy 95 E Valley View
Amargosa Valley, N36°40.803 W116°37.570
Elev ~ 2600 ft. 3-16-01 - had substrate w/ pebbles
microbes. Grating Adamsia (4 creosote community),
♀ Hesperis - Many seeds worked w/ little success

(MCH 01-041) NV: Nye Co., Hwy 95 1.6 mi SE just
w/ Valley View Rd N36°40.311' W116°30.901'
Elev ~ 2600' 3-16-01 - sandy creosote + Adamsia
single ♀ Hesperis, again many plants
worked. Trinities very sparse here.
(HIGH WINDS MAY HAVE HAMPERED US!)

(MCH 01-042) NV: Clark Co., Logandale, just
E of Bowman's Reservoir N36°37.751'
W 114°28.320' Elev ~ 1500 ft 3-17-01
- sandy mess on slopes / buttes East of
Muddy River, all along the Mosaic Valley
- collected several ♀ Hesperis on Adamsia deltoidea,
no ♂♂ seen. other plants in herb =
bullet: grass, shrubs, occasional Sphaeralcea

MCH 01.043

NV: Clark Co., Logandale, off Hwy 169, just Cottonwood / Palo Verde Streets N 36° 33.863' W 114° 27.781' Elev ~1380 ft 3-7-01 (MAREK / ALLEN) - collect ~ 10 ♂ / 10 ♀ *H. signatus* in abandoned field w/ selfgrass, cottonwoods / willows on edge. ground loamy, light, most spiders in sparse grass + edge, 4 Crystal Springs. 5 ♂ *H. signatus*

MCH 01.044 NV: Clark Co., Hwy 169, Lake Mead NRA, Blue Point Springs N 36° 23.374' W 114° 25.717' EW ~1500 ft - DISTICHILIS, planted palms ♂ ♀ *H. signatus* in selfgrass - more habitat available (3-17-01)

MCH 01.045 NV: Clark Co., Eldorado Valley, Hwy 95, ~ 2 mi S just w/ Hwy 165 to Nelsons. N 35° 48.413' W 114° 56.541' SEW ~1900 ft - breeding *Ambrosia dumosa* in *Ambrosia* / creosote dominant valley. collect ♂ *H. signatus* (Arenas? / Metapetriz?). No *H. signatus* found. wrong substrate??, very bad, probably - no sand. Looked in 2 other places in Eldorado Valley w/out success. lower valley site w/ *Atriplex*, *Ambrosia*, *Leucaena* - decent habitat, no spiders??

Comments on TRIP: *H. signatus* & *H. tricolor*

Recent Rain - the early part of 2001 w/ much rain in the deserts - east of CO River amazingly lush, *Ambrosia* in great shape throughout trip

Habitat Preferences of *H. signatus* - we noted signs of differing preferences - e.g., spiders on *Atriplex* & Mesquite Valley / Stonepipe (no other candidate plants), but on *Ambrosia* & Dunsmuir w/ *Atriplex* available. Patchiness of *H. signatus* - many signs of "spotty" dispersion, e.g., finding no spiders for considerable time, then finding several on adjacent plants (sibs?) - not always the case, but seemingly often.

H. tricolor - native hab along CO river very limited, but AG habitats supporting pups (probably non-equilibrium dispersal dynamics, e.g. recent weedy colonization). more "oasis" habitats in east probably w/

H. tricolor - certainly along entirety of *Ambrosia* River - also look @ Virgin River. Many other isolated springs w/ potential

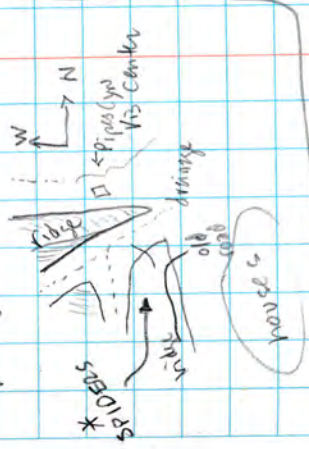
MCH 01-046 CA: San Diego Co., SDSU campus, Mediterranean grading on grass 30 March, 01 Hesperomys pyrrithrix collected on lawn.

MCH 01-047 UT: Juab Co., Little Sahara Dunes BLM Mc Area N39° 40' 300' W 112° 21' 375' Elev. ~1100 ft. 4 April, 2001 w/ K. Candell, J. Fetzner, M. Porter, M. Losada - good dune w/ Artemisia on edge / Chrysothamnus + Atriplex on dunes themselves; lots of ATV tracks in vicinity, but "internal" dunes fairly intact. Collecting on very cold day - no Hesperomys best of sifted; found Retepidippus, many ♂♂ & ♀♀ phalangids ♂ Xysticus, various Leucopneustes

MCH 01-048 UT: Juab Co., Hwy 6 ~0.5 mi. W of Eureka, base of Tiute's Mtns, N39° 56' 778 W 112° 08' 098' Elev. ~6300' 4 April, 2001 w/ same group & above i. pinyon / juniper hillside / draw w/ limestone substrate Many (~30) ♀ Phidippus found in nests under rocks, collected ~10; other misc spiders / scorpions / mites - no opiliones found

MCH 01-049 CA: San Bernardino Co., Big Morongo Canyon Reserve, vic. Morongo Valley N34° 03' 027' W 116° 34' 216' Elev. ~2500 ft. 8 April, 2001 w/ M. Lowden - cottonwood marsh in desert chaparral. put Hesperomys? 2 ♂♂ Hesperomys in grass; many ♂♂, fewer ♀ Hesperomys in grass towards Caristan Park; Hesperomys group (Hesperomys?) in sparse grass w/ dirt / open ground w/ cottonwood litter - many ♂♂ / ♀♀

MCH 01-050 CA: San Bernardino Co., Pipes Canyon Nature Reserve, E Van Buren Mtns. N34° 10' 069' W 116° 52' 778' Elev. ~4500 ft. 8 April, 2001 w/ M. Lowden

 - collecting on open ground, mostly decomposed granite, along ridge / old trail - desert chaparral habitat w/ monardella, pinyon, Ceanothus + fairly rich veg habitat. 2 ♂♂ / 1 imm Hesperomys collected stop small rocks on DB - ♂♂ small, looking first leg binged - most like Mojave desert forms (15 ST?).

MCH 01-051 CA: Riverside Co., N of Palm Spring, off Indian Ave., 1.4 mi. N just W Hwy 111 N 33° 52' 239' W 116° 32' 319' Elev. ~ 600 ft. 8 April, 2001 w/ M. Louden (*SAME SITE AS MCH 00-163)
 - beating veg in open flats, sandy, w/ 2 sp Psoralea, Ambrosia dumosa, Hymenoclea, exserted creosote - look specifically for H. signatus here found but conditions very windy. Found various thymids, philodromids, Sesuvium, dictyonid, ♂ Metopius, tenebrionids

MCH 01-052 CA: Imperial Co., Hwy I-8 e Mountain Spring Rd Exit, ~ 1 mi SW of southside junctions N 32° 40' 348' W 116° 05' 913' Elev ~ 700 ft metas 14 April, 2001 * SAME LOCALITY AS MCH 01-002 - several large Sorybus collected under rocks in small sandy washes - not common, clumped (eg several under same rock). Both adult ♂'s & ♀'s. Adult/immature Solpugid collected under rock.

MCH 01-053 CA: San Diego Co., Old Hwy 80, 2.5 mi. E just W/LAPOSTA/LP Truck Tr. N 32° 42' 983' W 116° 23' 394' Elev. ~ 4000 ft 4-18-01
 - manzanita (2sp?), chamise (dominant), red shrubs habitat on white DG substrate (very close ~ no herbaceous layer). Some manzanita in flower, habitat in sparsely good shape.
 - Tmarus angulatus (?) (Thymid) most common crab spider, found on both manzanita & chamise. Many adult ♂'s, fewer adult ♀'s (most ♀ subadult). juveniles w/ strong abdominal protuberance, less obvious in adults - single ♂ ELP dundelei from chamise; Philodromus chamensis on both chamise/manzanita - ♂ molting to adulthood w/in week of collection.

MCH 01-054 CA: San Diego Co., 1.5 mi. SW just I-8 w/ Buckman Springs Rd., off Buckman Springs Rd N 32° 44' 974' W 116° 29' 885' Elev ~ 3300 ft 4-18-01 - chamise flats w/ scattered manzanita, some OAK + Artemisia, other vascular (flats at valley edge on upper west side)
 - Tmarus angulatus common on chamise, particularly adult ♂'s; ♀ Ebo fairly common on chamise, most adult, juv. molting soon after bringing to lab → in E. dundelei / E. prostratus / E. californicus complex.

01-054

Philodromus chamisia in chamise, ♂ molting to adulthood seen after bringing into lab, otherwise imm. in field; ♂ Misumena imparitarsis

01-055

CA: San Diego Co., I-8, ~ 1 mi. E Williams Rd Exit, N side, vic. Viejas
N 32° 50' - 366' W 116° 39' 955' Elev ~ 2900 ft.
4-18-01 - chamise, occasional Misumena -
Eriogonum in flats
- Tetrus angulatus most common
crab spiders in chamise, mostly adult
♂♂s.; ♂ Philodromus chamisia! on
chamise, other subadult seen, but not
collected

01-056

CA: San Diego Co., Pt. Loma
Naval St., E. Barden Field Site, sandstone
outcrop / chaparral community 19 April, 2001
Elev ~ 500 ft. - collected adult ♀ Habidulus
in good shape along study trail on
southern edge of habitat, overhanging bay -
spiders in places where sand has accumulated,
- highly dehydrated. Males w/ small
pebbles in rear but no spiders? 2 adult
♂♂s collected, but both rubbed.

01-057

CA: San Diego Co., PALOMAR
Mtn., off Observatory Trail, ~ 1/2 mi.
below Observatory Lot N 33° 21' 105
W 116° 52' 123' Elev ~ 5500 ft. 29 April 01
- ♂♀ Hkawini in open ground in
Eriogonum / grassy flats - fairly common.
Various Thomisids / Philodromids collected
by beating, most oak trees, at
least 2 ♂ species of Aras. adults
included ♂ Tetrus; most others
subadult.

01-058

CA: Riverside Co., Hwy 243, 5.8 mi.
S Banning I-10 jct. N 33° 53' 435
W 116° 51' 735 Elev ~ 3400 ft. 1 May, 2001
W side of Hwy, roadside chamise + sage +
manzanita. => pullout near cottonwood tree
- most crab spiders still immature, including Philodromus chamisia
- collected from both Cham & Manzan
maturing adults:

01-059 CA: Riverside Co. N Peln

Spring - SAME AS MCH 01-051

N 328 52.239' W 116° 32.319'

Elev ~600 ft. 1 May, 2001

- Dalea sp. in disturbed area, beetles

directly into ground, middens, ~~ant~~

50/4 adult *Hesperis* - 18 from creosote!! 87

Mutigena / *Ely* from Dalea, 24 *Micaria*

CA: San Bernardino Co., 0.5 mi. N Hwy 247

01-060 Johnson Valley, OHV road N 34° 22.527°

W 116° 32.680' Elev ~3000' 1 May, 2001

Ambrosia densa w/ creosote, sandy flats

towards valley bottom - no *Hesperis*

found; 8 *Euryopis*, 3 *Mutigena* in *A. densa*

2 *Cryptodromus* under scrubs

01-061 CA: San Bernardino Co., Hwy 247 E just

SANTE FE FIRE Rd., E side Lucerne Valley

N 34° 25.964' W 116° 48.345' Elev ~3100'

1 May, 2001 *A. densa* + creosote,

occasional S-tree, sandy / gravel soils

23 / 9 / 2 imm *Hesperis* from *A. densa*

many oxyopids, including *Mutigena* (1 *A. densa*)

3 *Mutigena* from *A. densa*

MCH 01-062 CA: San Bernardino Co., Hwy 173,

1.5 mi. SW Mojave River Forks Canyon N 34° 18.758'

W 117° 16.448' Elev. ~3300' 1 May, 01

- wonderful old chamise + *Ceanothus* +

Arctostaphylos along road on south

side, continuing onto San Bernardino

NF - extensive chaparral habitat

P. chemis subabundant on chamise; beautiful black-red

Philodromus on large-leaved *Arctostaphylos* => brown

not seen this elsewhere!! small *Araucaria*?

Theridion

Adults molting to maturity!

Philodromus chemis - several eggs molting 1st week of

collective

Philodromus verityi 87's maturing in lab 1-3

weeks post-collection. All morphologically red in

color

MCH 01-063 CA: San Bernardino Co., Hwy 173

E Mojave River Forks Canyon N 34° 19.892'

W 117° 15.766' Elev ~3200' 1 May, 2001

po *Allophane* *Hesperis* under rock

[MCH 01.064] CA: SB Co., Hwy 73, 1 mi. E
 Junc w/ Hwy 138, vic. Silverwood Lake
 N 34° 18.553 W 117° 20.001 Elev ~ 3200'
 2 May, 01 - vrsb c bottom of Hesseheit
 Cyn - cottonwood / willow litter on
 sand/gravel substrate ♂♀ Hefamosus,
 ♂ Hesilius group

[MCH 01.065] CA: VB Co., El Mirage Valley, SE
 corner, off El Mirage Rd. N 34° 36.292'
 W 117° 32.575 Elev ~ 2900' 2 May, 01
 - stabilized dune field @ SE corner of lakebed -
 best towards OHV area road, becoming more
 stabilized moving E (interior)

(@ Mt. View Rd.) - pure Atriplex
 occasional J-Tree, creosote to the East
 ♂ Sarcocaus, ♂♀ Metapiza, ♂♀ Hscottszalei
 on Atriplex, >> harder substrates
Ebonia, ♀/imm Hsignatus on Atriplex
 in sandier areas

[MCH 01.066] CA: SB Co., Silver Lake (Melendike), C
 Mojave River crossing N 34° 44.644'
 W 117° 20.004 Elev ~ 2500 ft 2 May, 01
 ♂♀ Hefamosus on edge of grass v/
 cottonwood litter

OTHER SITES:

- OLANCHA dunes - various plant TAXA,
 dunes nice. There on humid day -
 very windy

- Coso Salt Valley - Atriplex sp, but
 no sandy soils found.

- China Lake Valley - good sandy sub w/
Atriplex, Ambrosia, Hymenoclea → should
 be here!

[MCH 01-067] CA: Kern Co., 3 mi. E Oll City on
 Bandman Rd, just China
 Grade N 35° 27.100' W 118° 56.605'
 Elev ~ 500 ft. 3 May, 01 - Atriplex + Hymenoclea,
 slightly sandy (mostly stabilized)

[MCH 01.068] CA: Kern Co., JNC CHINA GRADE/
 Alfred Hurrell Hwy N 35° 25.071 W 118° 57.300'
 Elev ~ 570 ft. 3 May, 01 - Atriplex in small
 wash w/ coarse sand / gravel

(MCH 01.069) CA: Kern Co., NE Tule Elk
State Reserve N 35° 18.734 W 119° 20.589
Elev ~300 ft. 3 May, 01 (Tupman Rd)
C CA Agave (et) - Atriplex on
hardpan soils, ♂ Alouatta texensis,
♂ Met. pers.

(MCH 01.070) CA: Kern Co., ~1 mi. NE just I-5
w/ Hwy 58 (Butterville / McKittrick Exit),
off Tracy Rd. N 35° 24.767 W 119° 24.179
Elev ~350' ft. 3 May, 01 * (East valley
Tracy / Sullivan Rds). Atriplex on
disturbed hardpan soil - some on mounds.
(old dunes), w/ owl burrows allowing for
some soil turnover (ie not compacted).
- 4 adult ♂ "blonde hirsutus", fairly
common; ♂ Krypticus
♂ ♀ mixed

philodromids - Ebo mexicanus ♂ ♀ adult

Photo Log

Velvia (12-15-98)	- dual flash	⊕ 1.7		
Hustulatus M0368	MCH 98-059	Harguizablos		1-7
" M0384	"	"		8-11
" M0398	MCH 98-057	In-Ko-Pah		12-16
" M0403	"	"		17-21
" M0418	"	"		22-25
" M0438	"	"		26-31
" M0428	"	"		32-34
Hsignatus M0358	MCH 98-058	Ocotillo		35+
(Velvia 1-3-98)	- dual flash	⊕ 1.7		
Hustulatus M0448	MCH 98-057	In-Ko-Pah		1-3
" M0458	"	"		4-6
" M0468	MCH 98-060	Brown Mtn, AZ		7-11
" M0478	"	"		12-14
" M0488	MCH 98-061	Bailey Wash		15-18
" M0498	"	"		19-23
" M0508	MCH 98-062	Altam Wash		24
" M0518	"	"		25, 26
" M0528	"	"		27-29
" M0538	MCH 98-063	Owl Heads		30, 31
" M0548	MCH 98-064	Hayden Road Rd.		32-7
(Velvia 2-1-99)	- dual flash	⊕ 1.7		
Hustulatus M0648	MCH 99-002	Stojas		1, 2
" ? M0688	" 99-001	Las Cruces		3-5
" M0668	MCH 98-055	Culp Valley		6-8
" M0448	" 98-057	In-Ko-Pah		9, 10
" M0458	"	"		11, 12

Photo Log

(2-11-99 Velvia - continued)

<i>Hustulidus</i>	M061♂	MCH 98-063	Out Heads	13, 14
"	M052♂	98-062	Altaviewish	15, 16
"	M054♂	98-064	Hayden Park	17-19
"	M066♂	98-055	Culp Valley	20
"	M068♂	99-001	Lrs Caves	21, 22
"	M069♀	"	"	23, 24
"	M064♂	99-002	Steins	25
"	M065♀	"	"	26, 27
"	M050♀	98-062	Altaviewish	28
"	M055♀	98-066	Filemuth	29
"	♀♀	98-065	W Dudleyville	30

Httaxcelinus M070♂ wpm 98-058 CARAPAS 31→

* 5-16-99 Velvia 5050 - START @ FRAME 18

- dur2 flash @ +1.7

<i>Hustulidus</i>	M073♂	MCH 99-004	Pine Ozel	18-24
<i>Hhazlini</i>	♂	MCH 99-008	Sans Carlos	25-29
<i>Hsplundus</i>	♂	MCH 99-021	Cullowee Mts	30-32
"	"	MCH 99-020	Buck Crk Sop	33→
<i>Hecerechus</i>	♂	MCH 99-018	cf Hayesville	1-6
"	♂♂2	"	"	7, 8
<i>Phlegra fasciata</i>	♂	MCH 99-021	Cullowee Mts	9, 10
<i>Phidippus</i>	♂	"	"	11-14
<i>Maevia nsp</i>	♂	MCH 99-015	Round Top Mt	15-23
<i>Maevia inclanensis</i> "grey"	♂	MCH 99-020	Buck Crk	24-29
"	♂	F. Coyle	F. Coyle house	30→

6-22-99 Velvia 13050 - frame #1
- dur2 flash @ +1.7

<i>Paramoera cf poultoni</i>	♂ wpm-99?	Az. Mills Co.	1-9
"	♀	"	10-17
"	♂ MCH 99-023	Dragsons	18-21
<i>Maevia inclanensis</i>	♀	DALLAS, TX	22-26
<i>Maipissa knota</i>	♂	G. Binford - NW South Carolina	27-31
<i>Tutelinia</i>	♀	G. Binford - INDIANA	32→

MCH	TAPE #8	Hustals	M036♂	98-059 M039♀	OK
"	98-058 Hustals	M035♂	♀ WPM 98-058	" ♀	good
MCH 98-057	Hustals	M039♂	" / MCH 98-050 WS	"	"
"	"	M040♂	?	"	good -
"	"	M041♂	"	"	"
"	"	M042♂	WPM 98-086 / MCH 98-050	"	"
"	"	M043♂	98-850 ♀	OK	"
MCH 98-060	Hustals	M047♂	Hustals MCH 98-059 ♀ (M088)	OK	"
"	"	M056♂	"	"	"
MCH 98-061	Hustals	M048♂	Hustals M038 ♀ MCH 98-059	Nice	"
"	"	M049♂	"	"	"
"	"	M057♂	"	"	"
"	"	M058♂	"	"	perfect -
MCH 98-062	"	M051♂	M059♀ MCH 98-062	good -	"
"	"	M052♂	"	"	"
MCH 98-063	"	M053♂	"	"	"
"	"	M060♂	M038♂ MCH 98-059	"	"
MCH 98-064	"	M054♂	"	"	"
MCH 98-065	"	M062♂	"	"	nice ✓
MCH 98-066	"	M063♂	M055♀ (98-066) / late	✓	"
MCH 99-002	"	M064♂	M065♀ 99-002	✓	"
MCH 98-055	"	M066♂	98-055 imm ♀	OK	"
MCH 99-001	"	M067♂	M069♀ 99-001	nice	"
"	"	M068♂	"	"	good
WPM 98-058	Hustals	M070♂	" if Swissbelonging ringed later close		

WPM 98-058 " 14/4 x 6 cm m070 ♂ " m068 ♂ " good
if Swissdelong irregular close

VIDEO LOG

MCH TAPE #9 - continued

WPM 98-058	Htlaxcalztus	M070♂	values & close
MCH 99-004	Hustulztus	M071♂	98-053 ♀ OK
"	"	M092♂	" "
"	"	M073♂	" "
"	"	M074♂	" good -
"	"	M075♂	" OK

Travel Log

1 April SD → Palomar (Nissan)
 6 April SD - Pine Valley (Volvo)

Hwy 177 Palen Roadside Asclepias
 N 33° 53.5' 76" W 115° 14.380" 253 m

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