

Collections 1-148 listed by
drainage system

[Everything else]
15 Oswego R.]

Hudson	Allegheny	Susquehanna	Genesee
20	92	15	51
55	93	16	52
71	94	22	53
73	95	25	86
132	96	26	87
	140	54	88
L. Champlain	141	61	89
112		68	90
113	Black	69	98
114	106	70	99
115	107	82 78	100
116	108	83	101
117	125	84	102
118	126	85	144
119	127	97	145
	128	139	146
	142		147
Chateaugay	143	Misc. L. Ont.	
120		29	
Salmon	Oswegatchie	30	
121	124	31	
Grass		32	
123	Raquette	45	
	109	46 (probably)	
	110	135	
	111	136	
	122a+b	137	
		138	

DWC Coll #1
May 23, 1948

N.Y., Cayuga Co., Town of Spring Lake. Outlet of Duck Lake

Sec RDS # 1813 (for data in locality - this is not RDS 1813).

(DWC # 29) Coll. 13F from here also

Coll. DWK. Orig. pres. 10% form.

Sept. 26, 1950 - into 80% alc after 1 wk. washing

March 24, 1951 O. i. immunis ♂ II

176175

(1)

DWC Coll. #2

July 3, 1949

N.Y., Tompkins Co., Ithaca, Cascadilla Cr. Edge of large pool at base of first falls below dam at heating plant. Coll. by hand 9:30 PM - 10:30 PM along about 20' of shore.

~~9 hard divity, 8 hard clean, 7 soft, 1 young of spec.~~
Coll. DW. Orig. pres. 10% form.

Aug 10, 1950 - 2 form II C. ~~Burtonii~~ ^{robustus} stylets mounted. Animals tagged.

Aug 15, 1950 - Into 80% alc. after 1 wk. washing.

March 14, 1951 Analysis of collection:

176155 C. robustus : 6 ♀♀ (1 soft), 388 ♀♀ (1 soft) 9

176156 C. propinquus : 12 ♀♀ (all soft or med. soft) (1 CT 33.2 mm) 12
388 I (1 soft, 1 soft?)

DWC Coll #3
July 18, 1949

N.Y., Tompkins Co., Fall Creek, Below bridge on first
rd. to left after passing RR underpass at
E. limits of Varna. Coll. Suttkus & Evans.
10' seine. Orig. pres. 10% form.

2 bottles - 1, 2 qt. jar + 1 ^{1/2 pt.} jar & small specimens.

Aug. 22, 1950 Into 80% alc (both bottles) after 1 wk. wash.

March 21, 1951

Large jar: ¹⁷⁶¹⁶⁷ C. robustus 1 ♀ (tagged)
¹⁷⁶¹⁶⁶ O. p. propinquus 35 ♂♂ I (1 soft, 1 C7h 31.4 mm - largest
specimen in coll., 1 with genital openings
on both 3rd + both 5th pereio., 1 with
gen. op. on L. 3rd + both 5th pereio. -
these last 2 tagged)
4 ♂♂ II (2 soft, 1 with both cheeks lost +
regen. to length of 7 mm.)
17 ♀♀ (1 soft, at least 2 with sperm plugs,
1 with 5 oviduct openings - 2 on 3rd,
2 on 4th + 1 on R. 5th pereio. - tagged)

Small jar: All O. p. propinquus
largest C7h L. 13.2 mm. (56)
smallest C7h L. 7.6 mm. (41)
23 ♂♂ 18 ♀♀

176166 propinquus (97)
176167 robustus (1)

(98)

DWC Coll # 4
July 19, 1949

N.Y., Tompkins Co., (RDS Area D7).

Coll. R.D. Suttkus (1- 1qt. jar & 1 smaller ^{1/2 pt.} jar with young of year)
Orig. pres. 10% form.

Aug. 24, 1950 - Into 80% Alc. after 1 wk. washing. (both jars).

March 21, 1951

Small jar: 1 O. i. immunis ♀ imm. (~~mixed juv.?~~)

O. p. propinquus 26 ♂♂

50 ♀♀ (1 with 2 additional oviduct openings on 5th pereopods - in vial)

1 hermaph. in vial (has receptacle + R. stylet)

Large jar:

176157 C. robustus 1 ♀

176158 O. i. immunis 2 ♀♀, 2 ♂♂ II (1 soft) - All 4 small

176159 O. p. propinquus 7 ♂♂ I (1 soft), 19 ♀♀ (3 with sperm plugs, 1 with only 1 oviduct opening on L. 3rd pereopod - tagged).

110

DWC Coll #5
Sept 12, 1949

N.Y., Tompkins Co., Ithaca, Fall Creek at Forest Home.

Current - mod.; Water - white + clear; Bottom - rubble, gravel + silt; Width - 250'; Depth - 2-4';

Coll. 10' seine, 7-9 PM, DWC + RD Juttkus
Orig. pres. 10% form.

Sept. 23, 1950 Analysis of Collection

C. bartonii ♀ R - 34.6 mm. CT_{1/2} length (hard, dirty)
♀ R - 25.0 — " — (hard, clean)
♂ II - 36.0 — " — (hard, clean)
♂ II - 33.8 — " — (hard?, clean)
♂ II 23.7 — " — (hard, clean)
O. propinquus ♂ II 22.0 — " — (hard, clean)
♂ II 19.1 — " — (hard, clean)
♂ II 21.5 — " — (hard, clean)

O. propinquus

♀ 13 R + 2 L, Smallest 19.3 mm CT_{1/2} length
Largest 31.7 "
♂ 8¹¹, all form I Smallest 19.5 "
Largest 27.6 "

Sept. 26, 1950: cluto 80% alc. after 1 wk. washing

March 14, 1951 The Cambarus are all C. robustus

175580 C. robustus 2 ♂ II + 1 ♂, 1 ♀ I ♀
175581 O. propinquus 8 ♂ I, 13 ♀

(8)

(21)

(29)

DWC Coll #6
Sept. 16, 1949

N.Y., Tompkins Co., Ithaca quadrangle, about $\frac{1}{2}$ mi. E. of
Varna in Fall Creek (DWC Area #1 - see Coll #21).

Crayfish picked up during use of Shocker 3:30-5 PM.
Coll. Crocker, Suttkus, Buttram. Orig. pres. 10% form.

Sept. 20, 1950.

all *O. propinquus*

175706

9 ♀, all right handed annuli
largest - 29.0 mm. CTh. length
smallest - 16.5

5 ♂ II; 15.4, 14.7, 14.8, 15.0, 16.2 mm. CTh. length

77 ♂ I largest - 32.5 mm. CTh. length
smallest - 17.2 mm

(also 18.0, 15.7, 19.0 and 19.1)
these were only ones under 20 mm.

Sept. 26, 1950: about 8% ab. after 1 wk. washing

✓

36

DWC Coll #17
Sept. 13, 1949

N.Y., Tompkins Co., Fall Creek at Red Mill

Coll. R.D. Suttkus. (2 jars) Orig. pres. 10% form.

Aug. 27, 1950 - C. Bartonii into 1 jar. O. propinquus into other.

C. Bartonii - 12 ♀

8 have ridge running to animal's right to enter fossa

5 - soft, 2 - hard, 1 - intermediate

4 have ridge running to animal's left to enter fossa

4 - soft, 0 - hard

16 ♂

1 - juv. or II, soft.

7 - II, 4 - soft, 1 - hard, 2 - intermediate

8 - I, 7 - soft, 0 - hard, 1 - intermediate

O. propinquus - 2 aberrant ♀♀ tagged.

1 had an extra genital on its right 2nd pericard.
Other had both its opening on 5th pr. instead of 3rd.

Aug. 22, 1950 - Both jars into 80% alc. after 1 wk. wash.

(over)

Sept. 24, 1950 - Analysis of O. propinquus jar:

9 ♀♀: 6 R + 3 L, 1 definitely soft (20.7 mm. Cth length)

5 ♂ I: Largest: 28.3 mm. Cth length

Smallest: 21.3 "

Largest: 25.0

Smallest: 14.5

7 ♂ II: Largest: 23.0 "

Smallest: 20.4 "

131
(over)

March 26, 1951 -

C. robustus - 8 ♂♂ I - 7 soft

7 ♂♂ II - 4 soft

1 ♂ II or imm. - soft

12 ♀♀ - 9 soft

28 specimens 20 soft

176220

C. p. propinquus

37 ♂♂ I (smallest 16.2 mm, ^{CTH.L.} 2 soft)

8 ♂♂ imm. (largest 19.4 mm, ^{CTH.L.} 1 soft - 16.4 mm. CTH.L.)

43 ♀♀ (26 with definite sperm plug)
smallest with plug = 16.4 mm. CTH.L.)

15 ♀♀ imm.

2 with aberrant
gen. op.

1 with aberrant
rostrum - these
3 tagged.

103 specimens

176221

Survey New York
Drainage Trib. Ontario Coll. No. RDS 1103 / DWC 8
Locality Trib. of Taughamnock 7/10 mi. N. of Perry City on Rt 227
County Tompkins Quadrangle Seneca Elevation 980'
Water white, clear Flow 20 cfs Width 20'-30'
Vegetation algae

Bottom rubble, silt in pools Current med-slow
Shore brush Distance from shore _____
Temperature: Air 68 Water 57 Time 5 PM Weather pt. cloudy
Depth of Capture 1-3' Depth of Water 3.5'
Method of Capture 10' seine Date Oct 3 1949
Collected by RD Suttus, Gibbs, Sagna
Orig. preserv. 10% formalin Time 4-5 PM
General notes:

Crayfish abundant
Salmo trutta - 3
Catostomus c. commersonnii
Notropis c. cornutus
Semotilus a. atramaculatus
Rhinichthys a. atratulus
Hypobrychus notatus
Campestris c. anomalum
Ambloplites r. rupestris

Aug 17, 1950 - Coll. C. Bartonii

6 ♂: 2 I - both intermediate
4 II - 2 soft, 2 intermed.

5 ♀: 4 with ridge of annulus running to animal's rt.
(2 soft, 2 intermed.)

1 with ridge of annulus running to animal's left.
(intermediate)

Aug. 26, 1950 - sent to 50% alc. after 1 wk. washing.

(over)

March 27, 1951

C. robustus

175920

2831

488-11 (2 soft)

592 (2 soft)

11 specimens

DWC Coll # 9

RJS 1104

Oct 3, 1949

N.Y., Tompkins Co., Potter Creek - Trib of Taughannock Cr.
1.3 mi N. Perry City on rt. 227.

Water: white, clear; flow 5 cfs; W 10-15'; current mod.;
Bottom rubble. little silt; Air 67°, water 60°, Pt. cloudy;
Depth of capture 1-3', depth of water 3'. Shore wooded.
Coll. 10' seine; Suttkus, Gibbs, Layne. 10% formalin

Aug 17, 1950 - All examined, all C. bartonii

7 ♂ - C.Th. 3 cm. or less (juv. or II)

2 ♂ - C.Th. 3.3 + 3.4 (juv. or II)

8 ♂ - C.Th. 3.5 cm. or over

6 - I, 1 - hard, 4 - soft, 1 - intermediate

2 - II, 1 - hard, 1 - soft

11 ♀ - 8 with ridge of annulus running toward
animal's right to dip into fossa.

3 with ridge running toward animal's left.

Aug. 18, 1950 - annulus from a ♀ mounted + animal tagged Ann. #1

Aug. 22, 1950 - sluto 80% alc. after 1 wk. wash.

March 27, 1951

C. robustus

6 ♂ I (4 soft)

2 ♂ II (1 soft)

9 ♂ (II or imm. - under 35 mm. CTh. L.)

11 ♀ (3 under 35 mm. CTh. L.) (1 annulus mounted)
(none with sperm plug)

28 specimens

176218

DWC Coll #10

RDS 1109

Oct 7 1949

N.Y., Tompkins Co., Five Mile Creek 0.3 mi E. Bostwick Corners
(or 1.3 mi SE of Enfield).

Water, white-slightly turbid; flow 10 cfs; Width 15';
bottom silt, clay, rubble, boulders; Current mod-slow;
shore brush; depth 4'. Air 60, water 55 at Time 4:10 PM
Coll 2:20 - 4:10 PM, Suttkus, Cole, Dilger. Orig. pres. 10% form.
10' seine.

Aug. 17, 1950 - All. C. bartonii

6♂: 3I - 1-soft, 2-intermed.

3II - 1-soft, 2-intermed.

4♀: 3 with ridge running to animal's right + into fossa.
1-hard, 1-soft, 1-intermed.

1 with ridge running to animal's left + into fossa.
(soft)

Aug. 22, 1950 - clute 80% alk. after 1 wk. wash.

March 27, 1951 -

C. robustus

3♂♂I (smallest = 37mm TL., 1 soft)

3♂♂II (1 soft)

4♀♀ (2 soft)

10 specimens

176161

10

DWC Coll # 11

RDS 1110

Oct 7 1949

N.Y., Schuyler Co., Tawghannock Cr. at Smith Valley or
3.3 mi SW Mecklenburg.

Water white clear; Flow 5cfs; Width 4-15'; Veg. algae;
Shore brush; Depth 3.5'; Current mod; Bottom rubble, silt,
gravel, clay. Temp. A 64, W 60 at 4:30 PM. Pt Cloudy.

Cell 4:30-6:00 PM Suttus, Cole, Dilger. Orig. pres. 10% form.
10' seine.

Aug 17, 1950 - All C. bartonii

6 ♂

1 I - hard clear, C.Th. 35mm.

5 II - 1 hard clear C.Th. 35mm., 1 intermed C.Th. 46mm.
3 soft (possibly juv.) C.Th. 20, 22.5, 23mm.

5 ♀

3 with ridge of annulus running to animal's right

2 with ridge of annulus running to animal's left

Aug 26, 1950 - sent to 80% Alc after 1 wk. Mashing.

March 27, 1951 C. b. bartoni

176152

3 ♂♂ II } all small (imm.?)

4 ♀♀

7

C. robustus

176153

1 ♂ I (C.Th. L. 35mm.)

2 ♂♂ II

1 ♀

4

DWC Collⁿ 12a+b
RDS 1111
Oct 8 1949

N.Y., Schuylker Co., Trib. Tawghonock Cr. 1.4 mi N.W. Perry City.

Water white clear; flow 3 cfs; Current mod-slow;
Width 10-15'; Depth 2.5'; Shore shrubby; Bottom rubble, silt;
Veg. algae; Temp A 73 W 66 at 3:45 PM; Weather Clear
Coll: 3-3:45 PM Suttens, Gilger. 10' env. 10% form.

b) Crayfish copulating in deep hole (2 1/2') by bridge.
Lying on their sides on bottom. Remained together while
held but separated after put in formalin.

These 2 are tagged. Stylet (rt.) taken from
♂ & mounted. Annulus taken from ♀ & mounted.

Aug. 17, 1950 - All C. bartonii, ~~all hard & dirty~~

3 ♀ - all with ridge of annulus running to animals right into fossa,
all hard

5 ♂ - 2 I - 1-hard, 1-intermed.

3 II - all intermed.

Aug. 22, 1950 - onto 80% alc. after 1 wk. wash

March 27, 1951 - C. robustus 2 ♂♂ I (each has CTh. 50 mm.)

3 ♂♂ II

3 ♀♀

8 specimens

176160

Copulating pair
are tagged

DWC Coll # 13

RJS 1112

Oct 8 1949

N.Y., Schuyler Co., Potter Cr. 1.8 mi W of Rt 227 or 3 mi
S.W. of Trumansburg.

Water white clear; Flow 20 cfs; Current slow-none;
Width 4-10'; Depth 2.5'; Bottom: rubble; Shon-
wooded; Veg-algae; Temp A 73, W 68 at 4:20 PM;

Weather clear; Coll 4-4:20 PM Sitticus, *Dilger*, 10% *seine*.
10% *forms*.

Stream practically dried up except for deep
holes.

Sept. 26, 1950: Into 80% alc. after 1 wk. washing

March 27, 1951 - C. robustus 1 ♂ II, 4 ♀♀ (none with sperm plug)

175784

(5)

✓

DWC Coll #14

RDS 1113

Oct 8, 1949

N.Y., ~~Schuyler Co.~~ Cayuga Co., Paines Cr. at Southern limits
of Aurora.

Water - white, clear; Flow - none; Current - none;

Width - 30'; Depth - 3'; Bottom - rubble; Shore - wooded;

Veg - algae; Temp - A 64, W (stream) 56, W (lake) 62 at 6:45 PM

Weather clear (dark); Coll - 6:15 - 6:45 PM Suttles, Sulger.
10' since. Orig. pres. 10% form.

Sept. 26, 1950: cluto 50% alc. after 1 wk. washing

March 27, 1951 - C. robustus 299 (netter with sperm plug)

175820

(2)

C. limosus

Ow's Coll #15
RDS 1114

Oct. 9, 1949

N.Y., Toga Co., Catatank Cr. 1 mi E. Spencer.

Water - white, clear; Flow - 150 cfs; Current mod. slow;
Width - 35-40'; Depth - 3.5'; Bottom - boulder, silt;

Veg - Abundant Elodea, Potamogeton, algae; Shore - open, brush;

Temp - A 73, W 6 - ? at 5 PM; Coll. 3:30-5 PM Suttles, Sledge
10' Seine. 10% form. Weather - clear Backus, Hensley

10 2 jars 1-99
1-88

Aug. 10, '50 All examined. Stylets similar to C. propinquus, but none show a median carina on posternum (either ♂ or ♀). Annulus with much more prominent tubercles than propinquus. All ♂♂ form I or juv.

Also all Coll 16 examined and results same.

2 stylets and 1 ^{right handed} annulus mounted from Coll 15, animals tagged.

Aug 15, 1950 - Auto 80% all after 1 wk. washing (both jars)

Aug 26, 1950 - jar of ♀♀ examined: 15 right handed, 5 left handed

March 27, 1951 - C. limosus 10 + 7 ♂♂ I (smallest 26.5 mm. CTn.L.)

17 ♂♂ 1mm. (smallest 19.0 mm. CTn.L.)

15 16 ♀♀ (all with sperm plug) (smallest 25.8 mm. CTn.L.)

4 ♀♀ 1mm.

54 specimens

176154

O. limosus

See also coll. 139 from
this same locality

Survey New York
 Drainage Saugerties R. Coll. No. RDS 1115 / DWG 16
 Locality Catonsville Co. at Caudor (pond on small island in mid-stream)
 County Tioga Quadrangle Orwego Elevation 880'
 Water white, clear Flow 200 cfs Width 20' - 100'
 Vegetation algae, Potamogeton
 Bottom gravel, silt Current mod.
 Shore pasture, open Distance from shore _____
 Temperature: Air 72 Water 65 Time 4:45 PM Weather Clear
 Depth of Capture 6" - 3' Depth of Water 3' +
 Method of Capture 10' seine Date Oct. 10, 1949
 Collected by Suttkus & others
 Orig. preserv. 10% formalin Time 2:30 - 4:45 PM
 General notes:

Aug 10, 1950 All examined. Put in 2 jars: 1♂ + 1♀.
 Results same as for Coll 15. (note see).

Aug 15, 1950 - Both jars into 80% Alc. after 1 wk. mashing.

Aug 26, 1950 - Annulus mounted, left handed, animal tagged: "Ann. 1"
 Jar of ♀♀ examined: 15 right handed, 4 left handed.

March 27, 1951 - O. limosus 20 ♂♂ I
 1 ♂ imm.
 19 ♀♀ (all but 1 had sperm plug)
 40 specimens

1760816

DWC Coll #17

RDS 1117

Oct. 18, 1949

N.Y., Tompkins Co., Cayuga Inlet near Fleming School.

Water - white, clear; Flow - 30 cfs; Current - mod. sluggish;

Width - 15-30'; Depth - 8'; Bottom - rubble, gravel;

Veg - Elodea, Lemna, Chara, algae; Shore - wooded;

Temp - A 58, W 60, 55 (Spring area) at 4:30 PM; Weather - pt. cloudy;

Coll 2:30 - 4:30 PM, Raney, Suttus, Cons. 8 class. 10' \pm inc.
10% form.

Aug. 10, 1950 - put in 2 jars: 1 - O. propinquus
1 - C. bartonii

Aug 15, 1950 - Both jars into 80% alc. after wk. washing.

Aug. 17, 1950 - Jar of C. bartonii

175682 1 ♂ I, 1 ♀ imm.

3 ♀: all with ridge of annulus running to animal's right.

(5)

Feb. 19, 1951 C. robustus (not C. b. bartoni)

Feb 20, 1951 O. p. propinquus 1 ♂ II, 3 ♂♂ imm. (II?)

1 ♂ II has a longer shell
on its styles than is usual

21 ♂ I, 9 of these appear to be less
than 20 mm. One measured 17 mm.

175681

10 ♀♀, one 19 mm. ♀ had a sperm plug.

(35)

(40)

PWC Coll #18
Oct. 19, 1949

N.Y., Tompkins Co., Dryden Lake outlet.

Coll. Rancey, Roecker & Cons. 8 Class. 10' seime. 10% form.

Aug 17, 1950 - Only 2 C. bartonii, both ♀
rest of adults - C. propinquus
young not exam. carefully.
Ridge in both ♀ C. bartonii runs to animals' right.

Aug. 22, 1950 - into 80% alc. after 1 wk. wash.

March 27, 1951 -

176216

C. robustus - 2 ♀♀ (tagged)

176217

C. propinquus - 35 ♂♂

22 ♂♂ 1mm.

38 ♀♀ (32 with sperm plug - smallest
of these CTh. L. 16.4mm.)

16 ♀♀ 1mm.

1 hermaphrodite (tagged) (2 aberrant
stylets & annulus)

~~118~~ specimens

114

DWC Coll #19

RDS 1120

Nov 4 1949

N.Y., Tompkins Co., Sixmile Creek 0.5 mi E. Stateville Springs.

Water - white, slightly turbid; Flow - 15 cfs; Current - mod-
fast;

Width - 15-20'; Depth - 2.5'; Bottom - rubble, silt;

Veg - water cress, algae; Shore - open woods;

Temp - A 51, W 43 at 1:30 PM; Weather - Cloudy;

Coll. 1:25 - 1:45 PM, Suttles, Cole. 10' swim. 10% form.

Coll. consists of only 1 specimen; in jar with assorted small caddisflies

Sept. 26, 1950 - into 80% alc. after 1 wk. washing

March 24, 1951 - C. robustus ♂ II CT_h 46.5 mm.

176176

(1)

Feb. 18, 1950

N.Y., Ulster Co., Kingston (near W. city limits between Kingston + Hurley). Esopus Creek. Coll. Theodore Wephe.

Sent to me by Ralph Palmer of NY State Museum.

Coll. label: These are average size crayfish found in this particular part of the creek, an area approximately 100 yds. long by 3 yds wide, sluggish current, sandy to muddy bottom, thick growth of water vegetation in summer. Last fall about 150 were found in this area; none smaller, a few larger than the specimens collected in Feb 1950.

In a card dated Feb 20 1950, Dr. Palmer says the crayfish were "found in pairs." Orig. pres. (70%?) Alc.

A st. stylit taken from a ♂ & mounted. Male tagged.

An annulus taken from a ♀ & mounted. ♀ tagged.

March 24, 1951 - O. limosus 4♂♂, 4♀♀ (largest 54mm Cth. L.)

176168

DWC Coll # 22
April 30, 1950

N.Y., Tompkins Co., Cantor Cr., Connecticut Hill Area.

Fast, cold, clear water. Width 6-10'; Depth 6"-3';
Rocky. Coll. H. Evans + DWC. 10' seine. 10% form.

Collected along road as far as beaver dams. All
crayfish seen were taken (except 1 - lost). 3-5:30 PM.

Mostly Rhinichthys atratulus & a few small Semotilus.
Seining & lifting rocks upstream of seine both
pretty unrewarding.

"Tipulid"? sticking out of mouth of one crayfish preserved
separately in a vial.

Aug 15, 1950 - elute 80% Ale. after 1 wk. washing.

Feb. 19, 1951 - All C. b. bartoni

175683

399, 208I, 208II

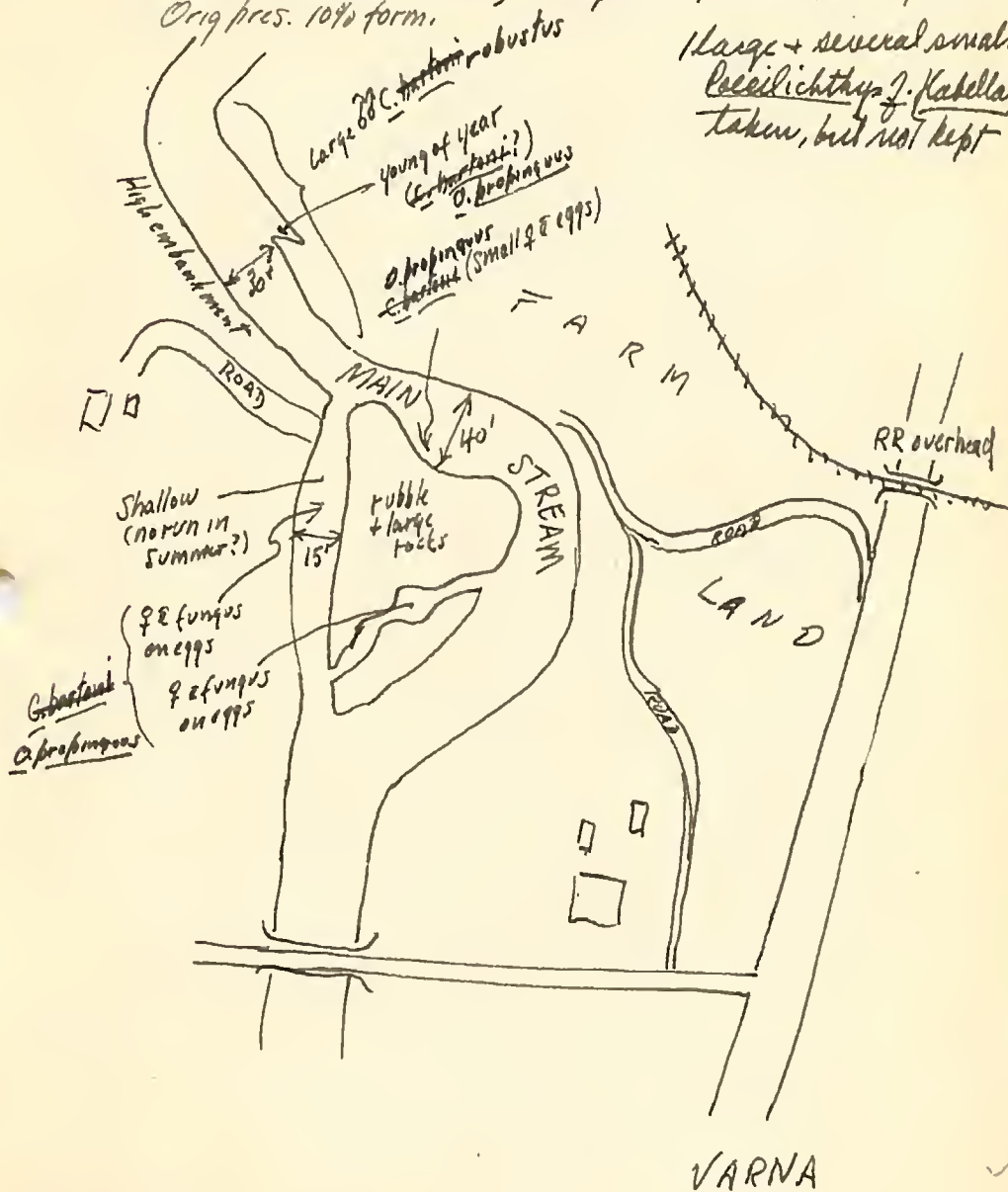
7

DWC Coll #23
May 3, 1950

N.Y., Tompkins Co., Fall Creek Area #2 (see below).

Current mod-fast; Width- see below; Depth- 1-4';
Bottom- rubble & boulders; Temp. W 59. Coll. DWC by hand.
Orig pres. 10% form.

1 large + several small
Poeciliichthys J. Kabelexis
taken, but not kept



Sept. 24, 1950 - cluts 80% Ale. after 1 wk. washing

Feb. 19, 1951 - O. propinquus 3 ♀♀ with eggs (one of these 18.6 mm CTh. L.)
175786 1 ♀ 1mm.

175785 C. robustus 3 ♂♂ II and 1 ♂ I

(8)

Dwt Coll #24

May 6, 1950

N.Y., near Tompkins-Cayuga Co. line. ~~For~~ Owasco Inlet
on road from Groton to Locke. at steel bridge by
farmhouse & partly dismembered barn.

Current mod.; Width 20-25'; Depth 1-3' (6' at edge
of bridge supports); Water - white, slightly turbid;

Temp. 59°; Bottom rubble & boulders. Coll. Dwt & H. Evans.
10' seine. 10% form.

[also went to Hemlock Brook (no crayfish): 49°F in
watercourse & rivet. 4 rainbows, 2 Cottus, many
amphipods]

Aug 17, 1950 - All C. bartonii, all hard & dirty

Feb. 20, 1951

C. robustus

175582 7♂

1 I - C.Th. 38.5 mm. long

6 II - largest C.Th. length 29.5 mm

14♀

3 - ridge of annulus runs to animal's left & into fossa.

11 - " " " right " "

Aug. 22, 1950 - sent 50% alb. after 1 wk. wash.

(21)
✓

Survey New York
Drainage Onwego R. ? Susquehanna Coll. No. RD5 1807 / DWIC Coll # 25
Locality Catawba Cr. 1 mi E. Spencer

County Tioga Quadrangle Onwego Elevation 975'
Water white, clear Flow 150 cfs Width 35-40'
Vegetation Elodea, Potamogeton, Algae

Bottom boulder, silt, rubble Current mod.
Shore open Distance from shore _____
Temperature: Air 67° Water 58° Time 4:00 PM Weather rainy
Depth of Capture 1.5'-2.5' Depth of Water 3'+
Method of Capture 10' seine Date May 13, 1950
Collected by Scottius Erwin, Col., Crocker
Orig. preserv. 10% formalin Time 3-4:30 PM
General notes:

Seining for about 1/8 mile upstream of bridge
(concrete) Bottom muddy at bridge, much
Elodea. 3-4' deep. Shallower & rubble
upstream.

Aug. 15, 1950 - into 80% alc. after 1 wk. washing.

Feb. 20, 1951 - O. limosus 5♂♂, 1♀ imm., 3 small ♀♀
1715684
175685 C. b. bartoni 1♀, 1♂, 2♂♂ (or imm.)

(13)

✓

Survey New York
Drainage Susquehanna Coll. No. RD5 1808 / DWC 26
Locality Catdunk Cr. at Candor
County Tioga Quadrangle _____ Elevation _____
Water white, clear Flow 200 ft. Width 100'-150'
Vegetation algae on rocks, slippery
Bottom rubble Current mod-fast
Shore open pasture Distance from shore _____
Temperature: Air _____ Water _____ Time _____ Weather _____
Depth of Capture 2'-2.5' Depth of Water 3'+
Method of Capture 10' seine Date May 14, 1950
Collected by Swittkys, Wiegley
Orig. preserv. 10% form Time _____
General notes:

Aug 15, 1950 - into 80% alc. after 1 wk. washing.

Aug. 26, 1950 - all specimens are C. bartonii.

Feb. 20, 1951 - C. b. bartoni 3♂♂ I, 2♂♂ II, 1♀ imm., 12♀

175821

DWC Coll #27

May 20, 1950

N.Y., Tompkins Co., Ithaca, Cascadilla Cr. at Cornell Univ.
riding stables.

A few crayfish from muddy bottom (steep slope)
in area 100 yds along stream at dam and above.

Most from shallow (1-2.5') marshy area opp.
stables. Current imperceptible. Here: many
large bullfrog & other tadpoles & small fish (common
suckers, Semotilus, Ambloplites & Lepomis.)

Coll. H. Evans & DWK. 10% inc. 10% form.

Sept. 26, 1950 - chits 80% ab. after 1 wk. washing

March 28, 1951 -

175822

175823

175824

O. p. probingus - 1 ♀ with eggs

C. robustus - 1 ♀

O. i. immunis 5 ♂♂ (3 soft)

2 ♀♀ (1 soft)

1 ♀ with eggs

1 ♀ with young

→
11 specimens



DWC Coll #28

June 5, 1950

N.Y., Tompkins Co., Robert Treman State Park at Enfield (upper Enfield picnic area). Small stream at right when entering area (Fishkill Creek).

One other C. bartoni (♀) seen in 5 min. of lifting rocks.

Current-fast; Bottom-rubble; Width-8'; Depth 1.5'

One specimen (tagged). Coll. DWC. Orig. pres. 10% form.

In bottle with Coll #48 (from same spot) - in 80% Alc.

March 28, 1951 - C. b. bartoni, 1 ♂ II

195931

(1)

Survey New York
Drainage Ontario Coll. No. RDS 1813 / DWIC 29
Locality Duck L. outlet at town of Spring Lake
County Cayuga Quadrangle _____ Elevation _____
Water brown, clear Flow 20 cft Width 10' - 15'
Vegetation Common - spatter dock
Bottom silt Current slow
Shore open, grass Distance from shore _____
Temperature: Air 65 Water 53 Time 10 AM Weather clear
Depth of Capture 3' Depth of Water 3'
Method of Capture 10' + 25' bag seine Date May 21, 1950
Collected by Raney, Sattler, Ichthyology class
Orig. preserv. 10% formalin Time 9:30 AM - 10:30 AM
General notes:

Collection consists of 1 specimen; in jar of misc. small collections.

Sept. 26, 1950: sluts 50% alk. after 1 wk. washing

March 24, 1951 *O. i. immunis* ♂ II

(see also DWIC Colls. # 1 from this same locality)
and 138

176177

①

✓

Survey New York
Drainage Oswego R. Coll. No. 1814 / DWG 30
Locality Reed Lake near town of Spring Lake

County Cayuga Quadrangle _____ Elevation _____
Water white, slow Flow _____ Width 1/4 mi.
Vegetation weed beds, reeds, cattails

Bottom sand, silt, trash, mud Current _____
Shore wooded Distance from shore _____
Temperature: Air 64° Water 62° Time 11:10 AM Weather clear
Depth of Capture 3 1/2' Depth of Water 3' +
Method of Capture 10' - 25' bag seine Date May 21, 1950
Collected by Raney, Sutt, & Leithydey Class
Orig. preserv. 10% formalin Time 10:40 - 11:10 AM
General notes:

Collection consists of 1 specimen; in jar with misc. small collections.

Sept. 26, 1950: puts 80% alc. after 1 wk. washing.

March 14, 1951 *O. p. propinquus* ♂ II (imm?)

176178

(See also coll. 136 from this same locality)

Survey New York
Drainage Ontario Coll. No. EDJ 1815 / DWL 31
Locality Red Creek S.E. of Westbury
County Cayuga Quadrangle _____ Elevation _____
Water Brown, clear Flow 20 cft Width 3'-15'
Vegetation muds

Bottom silt Current slow
Shore pasture Distance from shore _____
Temperature: Air 65° Water 62° Time 1:10 PM Weather Clear
Depth of Capture 3' Depth of Water 3'
Method of Capture 10' seine, 25' bag seine Date May 21, 1950
Collected by Raney, Sutt, & Ichthyology class
Orig. preserv. 10% formalin Time 12:45 PM - 1:20 PM
General notes:

Sept. 26, 1950 cuts 80% ale. after 1 wk. washing

March 28, 1951 - C. robustus: 1 ♂ I
1 ♂ II
1 ♀ 1mm.
5 ♀♀ (2 soft)
2 ♀♀ 1mm.

Aphrahmopus: 2 ♂♂ I
4 ♂♂ 1mm.
3 ♀♀ with eggs (emb. L. of 1 of these = 21mm)
9 ♀♀ 1mm.

28 specimens

July 5, 1951 - see also coll. 135 from this same locality.

Survey New York
Drainage Lake Ontario Coll. No. R.D.S. 1816 / D.W.C. 32
Locality Red Creek, Trib. of L. Ontario at town of Red Creek
County Wayne Quadrangle _____ Elevation _____
Water white, clear Flow 25 Width _____
Vegetation abundant algae

Bottom _____ Current _____
Shore wooded Distance from shore _____
Temperature: Air 66° Water 62° Time 2:05 PM Weather Clear
Depth of Capture 3' Depth of Water 3'
Method of Capture 10' seine, 25' seine Date May 21, 1950
Collected by Raney, Suttner, Leithydegg Class
Orig. preserv. 10% formalin Time 1:38 - 2:15 PM
General notes:

Collection consists of a single specimen; in jar with mud. small

Sept. 26, 1950: into 80% alc after 1 wk washing

March 14, 1951 *C. robustus* ♀ CLH 53.4 mm.

176179

①
✓

DWC Coll # 33
June 21, 1950

N.Y., Tompkins Co., Fall Creek at McLean. Small alternate channel
near bridge a few hundred yards N. of town.

Bottom - rubble; Current - mod.; Water - clear & white;
width - 8'; depth - 1'. Temp. W 62, A 67.

Coll. DWC, hand Time of coll.: AM about 15 min.
10% form.

1 ♀ + young preserved separately.

Sept. 26, 1950 into 50% Alc. after 1 wk. washing

March 10, 1951

175787 C. propinquus 5♂♂, 4♀♀ (1♀ with young
preserved separately)

175788 C. bartoni 2♂♂ II, 1♀, 1♀ imm.

175789 C. robustus 2♂♂ II (1 satt), 1♀

16
✓

DWC Coll #34

June 21, 1950

N.Y., Tompkins Co., Fall Creek at McLean, a few hundred yards N. of town. In main stream.

Bottom - rubble; Current - mod.; Water - clear + white;

Width - 25-30'; Depth - 2-4'; Shore - pasture;

Temp.: W62, A67. Coll. DWC washing behind Shocker grid.

Sept. 26, 1950 - clute 80% ale. after 1 wk. washing

Feb. 28, 1951 Analysis of collection:

175686 O. p. propinquus: 399, 10[♂] II

687 C. b. bartoni: 1♀

688 C. robustus: 1♀, 483 II

(10)

DWC Coll #35
June 21, 1950.

N.Y., Tompkins Co., Fall Creek at McLean, a few hundred yards N. of town. Upstream of steel bridge.

Not over 1/4 mi. from #34; about 100 yds upstream from #33. Conditions same as #34, but shore wooded. Some coll. (small specimens) done in a very small trap. (4' wide, 6" deep). Coll. DWC. by hand.

Sept. 26, 1950 - lute 80% Ala after 1 wk. washing

March 10, 1951 ¹⁷⁵⁶⁸⁹ O. p. propinquus 1 ♂ II

¹⁷⁵⁶⁹⁰ C. b. bartoni 3 ♀♀ (1 set), 1 ♀ imm., 2 ♂♂ II (1 set), 1 ♂ imm.

¹⁷⁵⁶⁹¹ C. robustus 2 ♀♀ (1 set), 2 ♂♂ II (1 set) 2 j♀ 1 j♂

Cambarus sp. 2 ♀, 2 ♂ - all very small

DWC Coll #36

June 21, 1950

N.Y., Tompkins Co., Fall Creek about $\frac{2}{3}$ mi. SW McLean on road to Malloryville. About 1.5 mi. stream distance downstream from Coll 33, 34 & 35.

About 8 non-bartoni ♀♀ & young seen (+ taken).

Most of the non-bartoni taken upstream of bridge in shallow bay near farmhouse (upstream of bridge).

Many here (about twice as many seen as were taken).

Many more ♀♀ here than ♂♂. Coll. DWC by hand.
10% form.

Conditions: Bay near farmhouse: depth - 6" - 1'; very slow current, water white & clear, bottom rubble (small).

Main stream: current mod.; width - 20-25'; water white & clear; bottom - silt, sand & gravel (rubble & some boulders at edges).

Crayfish all taken from stream edge.

Young removed from non-bartoni ♀♀ & preserved separately.

Smallest ♀♀ & young: C.Th. length in mm. 17.0
16.7
16.5

Aug 16, 1950 - Pleo. from ♂II mounted

Aug. 24, 1950 - Auto 80% Alc. after 1 wth. washing.

Feb. 27, 1951 - Collection sorted into 2 jars.

1 jar: ¹⁷⁵⁷⁹⁰ O.p. propinquus: 1 ♂I, 11 ♂II, 36 ♀♀, 1 ♀ imm.
~~1 12mm ♀ head~~

other jar: ¹⁷⁵⁶⁹² C. robustus 1 ♀, 1 ♂II ¹⁷⁵⁶⁹² C. b. bartoni 1 soft ♀, 1 ♂I, 2 ♀

~~Cambarus sp. 1 small ♀~~

(49)

(6)

(55)

DWC Coll #37

June 15, 1950

N.Y., Tompkins Co., Fall Creek just before coming to Etna
from Ithaca. No stream data. Coll. Clair Wing
524 S. Albany St.
Ithaca, N.Y.

A blue male! Seen by me June 22. Died
probably June 20 & was dried. When I saw it,
color was still very definitely blue, particularly
on upper surface of elytra. Mrs. Wing said it was
much more blue when caught & was blue all over.
Put in 10% formalin in order to soften parts for
a species identification.

In jar of misc. small collections

Sept. 26, 1950: elytra 50% alk. after 1 wk. washing

March 14, 1951

O. p. profinexus ♂ II

176180

(1)

DWC Coll #38

June 26, 1950

N.Y., Tompkins Co., Cornell Univ. Experimental Fish Hatchery
Ponds.

In pond 20' x 30', much filamentous algae.

Coll. DWC with dip net. Orig. pres. 10% form.

Sept. 26, 1950: auto 80% ab. after 1 wk. washing

March 28, 1951 - 2 ♂♂ II
1 ♀ soft
O. i. mamonis 2 ♀♀ imm.
175791 5 specimens

Also collected at same time and place: Experimental
animals 5, 6, 7, 8, 9, 12, 13, 14, now included in Coll. 72.

(5)

April 28, 1950

N.Y., Tompkins Co, Fall Cr. opp. Rose Gardens upstream from
Forest Home. Area known as Flatrock

Current mod.; Width 60'; depth 1-2.5'; Bottom rubble +
boulders. Orig. pres. 10% form.

39a { Most crayfish taken in seine (2 people turning rocks
just upstream of seine) to left + right of island about
100 yds downstream from "flatrock" area. Coll. Dr. Cole,
DWC + 6 others working from 2:30 PM-4:30 PM. At
least ~~399~~^{5. robustus} had sprung on pleopods.

All specimens used in O_2 toleration expts. +
when dead, placed in formalin. They are covered
with mineral oil used to seal water during expts.

39b { Also on same day, large jar O. immunis
taken from fish hatchery ponds + used for toleration
expts. Coll. by Milton Potash.

These all constitute Coll # 39.

8 XX jars O. immunis from hatchery)

(1 O. propinqua from Fall Creek)

(3 C. bartonii " " ")

Aug 12, 1950 - Specimens in all 6 jars washed with
chloroform, then 70% Alc. + then stored in 80% Alc.

Mineral oil seems to be almost all gone.

Aug. 17, 1950 - 99 checked for shape of annulus.

36 with ridge running to animal's right. Cambarus
11 " " " " " " " left.

Aug 26, 1950 - Jar of small ♀ O. immunis contains 75 specimens, the
largest is 23mm C.T. length. 2 of these are left handed
and are tagged sizes: 19mm + 20mm, C.T. length.

Aug 26, 1950 (cont.) - Jar of large ♀ O. ummima examined.

There are 62 specimens (average by inspection, about 32 mm, C.Th. length)

Only 4 without eggs: 34, 34, 32 and 26 mm. C.Th. length.

Smallest ♀ with eggs (4 smallest in jar) = 23 mm. C.Th. length

The other 3 next smallest ♀♀ with eggs measured 24, 25, and 28 mm C.Th. length.

March 28, 1950 -

Coll 39a C. robustus 14 ♂♂ I (one ♂ I is now discarded) (Smallest C.Th.L. = 32 mm.)

15 ♂♂ II (largest 39 mm, at least 7 others over 30 mm, remainder 1 mm.?)

Measurements:

39, 29.8, 32.6, 31.9, 32.9, 32.6, 32.0, 32.4, & 7 others the largest of which is 31.8.

34 ♀♀ (originally - 2 now discarded)

15 ♀♀ 1mm. (one of these is Exp. animal #2, now a part of Coll. 72)

74 specimens now in this collection

O. p. propinquus

13 ♂♂ I

1 ♂ II (C.Th.L. = 20 mm.)

3 ♀♀ (all with sperm plug)

3 ♀♀ 1mm. (1 of these is now Exp. An. #3, a part of Coll. 72)

19 specimens now in this collection

Coll. 39b. O. i. immunis (36 ♂♂ I (Smallest C.Th.L. = 23.2 mm., other small ones: 24.2, 24.3, 24.4, 24.4, 24.5, 26.8)

98 176 220

72 ♂♂ 1mm. (largest C.Th.L. = 25.9 mm.)

4 ♀♀

58 ♀♀ with eggs (Smallest C.Th.L. = 23.0 mm.)

75 ♀♀ 1mm.

245 specimens

Coll 39b.

O. p. propinquus

1 ♂ I C.Th.L. 38.0 mm.

in bottle of O. i. immunis ♂ I

74
19
245
339

176 2819

DWC Coll #40
July 8, 1950

N.Y., Tompkins Co., Fall Cr. 1/2 mi E. (upstream) from Red Mill.

Bottom - rubble; Width - 12'; Depth 6" - 1.5'; Water -
White & clear; Current - mod-slow; Temp - A69, W72.

Banks - pasture.

at 8:15 PM

Coll. 7:45 - 8:15 PM, DUC & RJSuttkus, all crayfish
seen were taken, by hand. Orig. pres. 10% form.

Sept. 24, 1950 - Analysis of collection:

C. ^{robustus} pacificus - 1 ♀ (soft), Right-handed annulus, 35.0 mm
175793 CT length

C. propinquus - 4 ♂♂: 1 juv - 6.2 mm CT length

2 II - 26.3

21.7

1 I - 26.0 (soft)

175794

28 ♂♂: 1 juv. 7.0 mm CT length

23 R (1 very soft, 2 intermed.)

4 L

Sept. 26, 1950: into 80% ale. after 1 wk. moulting

March 28, 1951 - The Cambarus is C. robustus

9 annuli have previously been mounted (C. propinquus)

DWC Coll #41

July 8, 1950

N.Y., Tompkins Co., Fall Cr. at 2nd bridge E. of Freeville on
road to McLean.

Bottom - rubble; Width - 30'; Depth 6" - 3'; Water -
white + clear; Current mod. slow; Temp - A69, W73 at
8:45

Coll. 8:20 - 8:45 PM, DWK + RD Suttikus, hand collecting - only
the one crayfish was seen (except 1 young - C. In. approx.
Orig. pres. 10% form. 5mm long)

In jar of misc. small collection - into 80% alc after 1
week swabbing on Sept. 26, 1950

March 24, 1951

O. p. propinqua ♀

176181

①

DWC Coll # 42

July 11, 1950

N.Y., Tompkins Co., Shallow cutback of Fall Cr. near
Fall Creek entrance to Cayuga lake

Water turbid, bottom soft mud, water foul smelling.

Coll. R.D. Suttkus, H. Evans. 10' seine. Orig. pres. 10% form.

Sept. 26, 1950: Out to 80% alc. after 1 wk. washing

March 28, 1951 - O. i. immunis 2 ♂♂ I (1 soft)
2 ♂♂ 1mm.
1 ♀ (soft)
~~2 ♀♀~~
1 ♀ 1mm.

6 specimens

1956 96

(6)

DWC Coll #43

July 23, 1950

N.Y., Tompkins Co., about 1/2 mi. E. Varna in Fall Creek. (DWC Area #1 - see Coll #21).

Hand picking 7:45 - 8:15 PM

Evidently this area used as gravel source, many deep furrows + gullies in bottom near edge and on shore.

Coll DWC. Orig. pres. 10% form.

Aug. 24, 1950 - slnts 80% Alc. after 1 wk. washing.

March 28, 1951 - O. p. propinquus 4♂♂ I

8♀♀ (4 soft, no sperm plug in hard ones)

also a moult (♂ II)

1 ♀ 1mm. (CTH.L. = 12.4mm.)

175707

13 specimens

(13)

DWC Coll #44

July 24, 1950

N.Y., Tompkins Co., Ithaca, ditch to right of road leading to Elmira (Rt. 13) about 1/2 mi from center of town

Water - ~~at~~ white? + very turbid, Current - imperceptible;
Bottom - silt + clay, Width - 12', Depth in middle - 2.5';
Shore - 2-3' banks, mud + same veg. 10' seime.

Coll. DWC + H. Evans. Orig. pres. 10% form.

Aug. 24, 1950 - sent 80% alc. after 1 wk. washing.

March 28, 1950 - O. i. immunis - 1 ♂ I (soft)
10 ♂♂ imm. (1 soft)
3 ♀♀ (1 soft)
16 ♀♀ imm. (1 soft)

30 specimens

145697

30

45

DWC Coll. #45

July 26, 1950

N.Y., Jefferson Co., Sackett's Harbor, Mill Creek about 200 yds. upstream from its mouth at L. Ontario.

Bottoms: boulders & rubble; Current - very slow; Water clear & white; Width 40'; Depth - 3'; Shore - left, a cement wall 8' high, right brush;

Temp. W - well over 70°F (near 80°F).

Coll. WB Nohry & DW Crocker; Orig. pres. 80% alc. by hand of 10' since.

One male^I (tagged) has rt. stylet removed (on July 26). This is mounted in a vial (Coll 45 Pko. 1)

See field notes for July 26 for character of other parts of stream and for this stream as type locality for O. p. propinquus.

Sept. 20, 1950: annulus mounted from ♀ tagged: Coll. 45 Ann. 1

Feb 30, 1951 O. p. propinquus 1 ♂ I, 308^{mm}, 1 ♀, 499^{mm}.
175 195

(9)

46

✓

Acquired July 26, 1950

Purchased from bait dealer in Sackett's Harbor, Jefferson Co., N.Y. dealer was not original collector. Original collector was another dealer living in Watertown.

Price \$.35/ doz. Orig. pres. 80% Alc.

Feb. 20, 1951 - ~~O. p. probingus~~ ^{O. i. immunis} 2 large ♀♀, 3 ♂♂ (or imm.)
 175698
 175699 O. p. probingus 1 ♀, 6 ♂♂ I

Survey New York
Drainage Conveys R. Cr. Coll. No. 1855, DWG #47
Locality Fall Creek 1/2 mi. north of Varna
at lower end of swimming hole below bridge.
County Tompkins Quadrangle _____ Elevation _____
Water white, clear Flow _____ Width 30'
Vegetation algar

Bottom grubble Current mod.
Shore wooded Distance from shore 15'
Temperature: Air 79° Water 79° Time 5:15 P.M. Weather pt. cloudy
Depth of Capture 2' Depth of Water _____
Method of Capture 10' seine Date July 28, 1950
Collected by Suttlery, Wigley
Orig. preserv. 10% formalin Time 5:00 - 5:15 P.M.
General notes:

Aug 5 - 1950 - rt. pleo. (stylet) removed from 2 ♂♂^(parac) & mounted;
males tagged as "Coll 47 Pleo 1" and "Coll 47 Pleo 2"

Aug. 22, 1950 - cluto 80% alc. after 1 wk. wash.

March 28, 1951 - O. p. propinquus
32 ♂♂ I
2 ♂♂ II
16 ♂♂ imm.
15 ♀♀ (4 with sperm plug)
9 ♀♀ imm.
74 specimens

176201

DWC Coll. #48
July 30, 1950

N.Y., Tompkins Co., Small stream at Upper Enfield picnic area (Map posted in area near refreshment stand at entrance to path into gorge calls this creek Fishkill Cr., but there is none such on topo. maps of area).

Water - white & clear; Current - mod-slow; Bottom - rubble;
width - 8'; Depth - 8" - 1';

Coll. DWX: _{by hand} Orig. Pres. 80% Alc.

2 Specimens

In bottle with DWC Coll #28

March 28, 1951 -

C. b. bartoni

1 ♂ 1mm.

1 ♀ 1mm.

175933

2

DWC Coll #49
Aug. 5, 1950

N.Y., Tompkins Co., Fall Cr. 2mi. E. Freeville on rd. to McLean
at farm known as "Fall Creek Farm". Same spot as Coll. #40.

Bottom rubble, Width ~~12~~ 12', Depth 3"-2', Depth of capture -
3"-1.5', Water-white & clear, Current mod-slow, Temp. W 69, A 70
Banks - pasture. Orig. pres. 80% Alc. at 6:15 PM

Coll RD Sotthus + DWC 5:45 - 6:15 PM. Coll. by hand.

At time of leaving one couldn't take a step in the water
without starting up 4-8 O. propinquus. Very common.

2 jars - 1 O. propinquus + 1 C. Bartonii

Aug. 17, 1950 Jar of C. Bartonii

3♂ II

3♀ with ridge of annulus running to animal's right.

March 28, 1951 - C. b. bartoni 1♀ 1
175710 C. robustus 3♂♂ II
175709 2♀♀ 5
O. p. propinquus 10♂♂ I
12♂♂ imm.
8♀♀ (2 with sperm plug)
175708 18♀♀ imm.
1 hermaphrodite (tagged) 49
55 specimens

DWC Coll #50
Aug. 21, 1950

N.Y., Ontario Co., N.E. corner of Canandaigua Lake at
shore line. At picnic area to left (when facing lake) of an
amusement park.

Bottom - silt + rubble, some boulders; Depth - 8";

Water - white + clear; Shore - emergent veg. (sparse).

Temp - A 70°, W 74°; Time 2:30 PM; Collected ^{by hand} under
rocks where a couple were pushed from burrows
in a mat of small rootlets. One of the small
crayfish was found dead.

Coll. DWC & DMC Jr. Orig. Pres. 80% alc.

~~10' depth~~; time of coll. - 2 - 2:30 PM

March 28, 1950 -

O. p. propinquus 1 ♂ I

1 ♂ imm.

1 ♀

1 ♀ imm.

1 hermaphrodite

5 specimens

175796

(5)

51

DWC Coll # 51

Aug 21, 1950

N.Y., Boundary line between Ontario & Livingston counties.

Outlet of Honeye Lake at Rt. 5120, 1/3 of distance from W. Blenheim to Lima. Downstream 100 yds. from bridge.

Depth - 6" to 1.5'; Width - 25'; Bottom - rubble, silt & trash; Water - white & turbid; Current - slow to mod.; Banks - fairly steep, 6' high, covered with weeds, grasses & rocks; Temp. - A 71°, W 73°; at Time - 5:00 PM. Time of coll. 4:15 - 5:00 PM. 10' seine; Coll. DWC & JMC; Orig. pres. 80% Alc.

Aug 25, 1950 - stylet (♂) & annulus mounted, animals tagged D1001 & Ann 1

Feb 20, 1951 O. obscurus ¹⁷⁵⁷⁰⁰ 2 ♀♀, 3 ♂♂ imm., 4 ♂♂ imm., 6 ♂♂ I (15)

C. robustus ¹⁷⁵⁷⁰¹ 3 ♂♂ II, 1 ♀ (4)

Cambarus sp. ¹⁷⁵⁷⁰² bartonii 2 small specimens 1 ♂ II, 1 ♀ (2)

Neither shows depressions in hand
Both have only 3 rows punctations in areola
Eyes particularly in ♂ seem small
Rostra seem intermediate
Ant. scale of C. bartoni type
These appear to be C. bartoni.

(21)

✓
51

DWC Coll #52

Aug. 21, 1950

N.Y., Monroe Co., Genesee River by bridge at junct. of
Rts. 252 + 383. Outside Rochester City limits, about
5 mi. from center of city.

- Bottom - silt (soft mud), a few stones, trash; Depth (of capture) 1.5' - shore; Width - 60' (?) very rough est.;
Shore - grasses + weeds; Current - barely perceptible;
Water - white + turbid; all coll. except 2.
Crayfish from right side of river where bottom sloped off rapidly. Left side had shelf (underwater) going out about 4' + then practically dropped off.

Coll. DWC + JMG.; 10' seine; Oxy. pres. 8% alc.
6:30 - 7:15 AM

Feb. 20, 1951 O. p. probinquus 3♂♂I, 1♂II (or imm.), 3♀♀

175797

(7)

✓
2

Alb. C. Coll #53

Aug. 21, 1950

N.Y., Monroe Co., Genesee River in city of Rochester at foot of Fraternity Rd. (Univ. Rochester, Mens College).

Right side of river. End of shallow lagoon, length unknown, running parallel with river, its opening at ~~the~~ downstream end of its long axis (at least not at its upstream end).

Bottom - silt (soft mud); Width - 10'; Depth - 1.5' max.; Water - white + clear; Current - imperceptible; Shore - scrub growth + tangle of vines; Time of coll. 8:15 - 8:30 PM, Coll. AlC + JMC; 10' seine; Orig. pres. 80% Alc.

Aug. 22, 1950 - a pleopod^I + an annulus removed. Animals tagged: pleo 1 and ann 1.

Feb. 20, 1951 175703 ♀ O. i. immunis

175704 O. p. propinquus 3 eggs, 1♂ I, 5♂♂ II, 1♂ imm.

1
10

(11)

✓
50

DWC Coll # 54
Aug. 25, 1953

N.Y., Tioga Co., Susquehanna drainage, Outlet of Spencer lake, 200 yds. from dam.
Bottom - rubble, sand + silt; Width - 12'; Depth - 1' - 2';
Current - mod.; Water - white + clear; Shore - secondary growth, stream generally shaded.

Coll. DWC + BP Young 9:30 - 10:30 AM. Hand coll. + 10' seine.
Orig. pres. 80% Alc. ~~2 juvs, one ^{1st} inst. containing a P. wlf found copulating.~~

Feb. 18 1951	<u>O. p. propinquus</u>	22 ♂ I	none soft	Copulating pair tagged
		8 ♂ imm	"	
	175798	17 ♀	"	
		8 ♀ imm.	"	

DWC Coll #55
April 2, 1950

N.Y. Westchester Co., Sawmill River stream in Yonkers(?),
near the crossroad to Nepera Park.

Coll. H. & E. Evans. Orig. pres. 10% form.

Collection consists of 1 specimen - into 80% Alc. on Sept. 26, 1950
after 1 wk. washing; in jar of misc. small collections.

March 24, 1951

O. limosus ♀

176182

56 (1)
✓

DWC Coll. #56

Oct. 12, 1947

N.Y., Tompkins Co., Ithaca, Inlet Stream on Rd. to Elmira.
Near R.R. bridge.

Coll. Evans, Suttkus, Roecker. Orig. pres. 10% form.

Sept. 24, 1950 - Analysis of collection:

999: 6R+3L, 1 definitely soft (20.7 mm CTh length)

Largest: 25.0 mm CTh length

Smallest: 14.5 "

501 Largest: 28.3 "

Smallest: 21.3 "

70^{II} Largest: 23.0 "

Smallest: 20.4 "

Sept. 26, 1950 - into 50% alc after 1 wk. washing

Feb 17, 1951 - O. p. propinquus 175583

(21)

DWC Coll. # 57

Sept. 4, 1950

N.Y., Boundary line Schuyler + Tompkins Cos., Potter Creek
50 yds above bridge on Rt. 227. At shoreline and
among dense patches of Elodea. Temp. W64, A64.
Depth of capture - 1' - 3'; Water - white + turbid;
Bottom - silt, sand, some scattered rubble, Elodea beds.
Cole Dale + SMJC Orig pres 80% alc

Feb. 17, 1951 - 5 mm. C. robustus 3♂, 2♀

DWC Coll. #58

Aug. 20, 1948

Kentucky, Harlan Co., Big Black Mountain. Elev. 4050 ft.
Under stone in a mucky spring run. Coll. Roger Barbour
Orig. pres. 70% alc.

1♂II and 1♀

175921 *C. bartonii*

(2)

DWC Coll #59
Sept. 17, 1950

N.Y., Tompkins Co., Buttermilk Creek just below point where
road makes a water crossing of the creek below
Tremman Lake.

Bottom - boulders & rubble; Water - clear + white;
Current - mod.; Depth 8" - 1.5'; Time of
coll. 5:15 - 5:45 PM. 10' Acine. Orig. pres. 80% Alc.
Coll. DWC + JMC

Feb 20, 1951 - S. b. bartoni 3♂♂I and 3♂♂II
175♂11

Coll 77 from same place

(26)

DWC Coll. #60
Sept. 18, 1950

N.Y., Tompkins Co., Fall Creek at upstream end of island below area known as Flatrock. Just outside of Forest Home (Athaca).

Bottom: - Boulders + rubble; Water - white & slightly turbid; Current - mod → fast in center; depth of capture 8" - 2½'; Time of coll. - 3:30 - 5:00 PM
10' seine; orig. pres. 80% alc.; Coll. DWC + JMSC.

Only one specimen taken, a large ♂ I. also for with other small Colls.

Many soft, both ♂ I + ♂ II + ♀ seen. One ♂ II taken in seine after lifting a single large rock along with a recently shed moult. The animal was very soft, even chelae, & was very recently moulted. The moult was Form I. Animal about 36 mm CTh length.

Of about 20 seen, only 2 were C. hesperus, rest were C. bartonii

March 14, 1951 - C. robustus ♂ I CTh 44.2 mm.

Probably all Cambarus in this area are C. robustus

176183

(1)

DWC Coll. # 61
Sept. 24, 1950

N.Y., Tioga Co., Waverly, ^{Cayuta} ~~Shepard's~~ Creek between Erie and
D.L. + W. RR bridges.

Bottom - rock bottom under sediment; Depth - 5";
Current - imperceptible; Water highly polluted with
sewage from Tioga Gen. Hospital.

Coll. Earl Deubler Jr. Orig. Pres. 80% Alc.

Feb. 17, 1951: O. p. propinquus
175800
2 ♀ I ♀
3 ♀♀ (2 mm.)
1 ♂ II
6 ♂ I Smallest 18.2 mm. CTh. L.
Largest 31.5 " "

C. b. bartoni
175999
2 ♀♀ (1 mm. ?) ♂
2 ♂ II (1 mm. ?) I ♀
1 ♂ I (soft)

(16)

62 ✓

DWC Coll # 62

Aug. 20, 1944

Mass., Worcester Co., East Brookfield

Coll. Ray Hock. Orig. pres. 80% form.

Rec'd from Wm B.
Mitting
Sept. 1950

Sept. 28, 1950 - into 50% alc. after 1 wk. washing

March 25, 1951 - O. i. immunis 388^AI

175936

63 (3)

Oct. 19, 1950

N.Y., Tompkins Co., Full Cr. at Red Mills - from a few yds. below bridge to 50 yds. above (to remains of old Mill dam). Coll. DWX + H. Evans mostly by hand. 80% Ak.

Bottle a. The only marked individual recovered of the 54 marked on Aug. 28, 1950. (37.7 mm.)

b. ♀ with a right copulatory stylet

c. Individual which showed shadow in stomach region under x-ray. Dissection showed gastroliths which with the stomach are in a vial in the bottle.

Kept in C. U. Harknessy troughs after x-raying

d. Died before marking on Nov. 15

e. Died after marking on Nov. 15

f. Kept in aquarium in Stinson hall. Layed eggs April 7, 1951. Killed in alc. May 29, 1951. (over)

March 29,
1951

176184 { 63a. C. robustus ♀
63b. C. robustus ♀? (has a rt. stylet - hermaphrodite?)
63c. C. robustus ♀ (3)

175801

63d. C. h. bartoni 1♀ (1)

175802

C. robustus 1♂ I
2♂♂ II (9)
1♂ mm.
5♀♀

63e. C. robustus 8♂♂ I (smallest CTL. = 34.4 mm.)

6♂♂ II

20♀♀

175594

63f. C. robustus 1♀ (1)

} given to
Hobbs
Jan. 1958

(14)

(Over) 64

63f. In large aquarium in Stimson Hall. Layed eggs
April 7, 1951 Water 62°F. ♀ on back with mucous
on abdomen.

April 15, 1951 - has 30-40 black eggs.

May 24, 1951 - first seen hatched

May 25, 1951 - 13 young, not attached to ♀ by chelae
or by telson thread or anal strand. Antennae
not between legs. 3 moult found + preserved.
1 animal preserved in Worcesters fluid.

May 29, 1951 - Only 2 young remain. Rest, except
for those preserved, must have been eaten
by ♀. These 2 (one a third stage) and
a moult preserved. Also one which had
been set aside in a watch dish preserved.
This latter still very humped.

The 3rd stage is the first seen (seen at
2 PM May 29) and the only one seen.

One 2nd stage? remains alive in a finger
bowl with algae. Has no external uropods.

Method of preserving young:

1. Fix 24 hrs. in Sat. soln. corrosive sublimate
in 10% form.
2. Wash in running H₂O 24 hrs.
3. Thru alcohols to 70% (20 min. in 35% + 50%)
4. Add iodine soln. until color permanent - left
in this 24 hrs.
5. Wash with 70% alc.

May 30, 1951 - The one animal remaining alive was second stage for at 10 AM it was found to have a tail fan complete. Its moult was recovered and is in a vial (marked May 30). The moult occurred between 11 PM May 29 and 10 AM May 30.

June 4, 1951 - Gut (stomach + intestine) filled with food - algae in the 6° finger bowl. This is first day seen with food.

June 28, 1951 - The living animal measures 5.4 mm. CTh. length. The preserved 3rd stage animal measures 4.7 mm. Glazed watched for moults, but none found. Maybe living animal has eaten its moults. The preserved one looks rather badly shrunken, however, but not enough to account for the 0.7 mm difference in size.

Dix Coll #64
April 25, 1950

N.Y., Tompkins Co., Fall Cr. 1 mi. N. Varna. (Area #1 - see
diagram under Coll #21).

Male found alive lying on back. Did not struggle when
captured by hand but fairly vigorous activity when
put in bottle. Died in about 4 hrs. Pres. 10% form.
14 to 80% Alc

O. p. propinquus ♂ - March 1951

176185

①
✓
6/6

DUX Coll #65

Sept. 21, 1950

N.Y., Boundary line - Tompkins & Schuyler Cos., Tauxhamock
Cr. at road leading into Perry City from the East.

Orig. Pres. 80% Ak. Coll. DUX.

A single moulting ♂. See field obs. for Sept. 21, 1950.

March 28, 1951 - C. robustus ♂I → ♂II

175712 Stylets of moult have been previously mounted.

CTh. L. moult - 34.8 mm.

animal - 39.3 mm.

1

✓
67

DWC Coll #66
Oct. 21, 1950

N.Y., Tompkins Co., Fall Cr. at Red Mills.

Coll. DUC. 80% Alc.

a. A large ♀ *C. bartoni* C.76. = 49mm.

See field Obs. for Oct. 21, 1950.

b. *O. p. propinqua* 2 ♂♂, one is a blue male. These
are dried in a jar on cotton. Blue color of
blue male gone. (See field obs. for Oct. 21, 1950)

176223

(2)

March 28, 1951 - 66a = *C. robustus* ♀

176186 66b OK as above

(1)

(3)

DWC Coll. # 67

Nov. 14, 1950

N.Y., Tompkins Co., Fall Cr. at Forest Home at upstream
end of elongate island which separates creek into
2 streams of about equal size. Taken from same
area in which animals were marked (celluloid tabs)
on Sept. 30, 1950.

Coll. DWC 80%AK.

March 28, 1951 - C. robustus 1 ♂ II
2 ♀♀
1 ♀ imm.
4 specimens

175803

(A)
✓
et

DWC Coll #68
July 13, 1950

N.Y., Nanticoke Creek at trib. 15, Proome Co.,
Susquehanna Dr.

Water - white, slightly turbid

Flow - 25 cfs

Current - slow - med.

Temp A - 78 W 69

Bottom - rubble, silt

Shore - pasture, woods

Depth - 4" - 3'

Method of capture - 120 volt shocker

Time - 10:45 AM

Orig. Pres. 10% form.

Coll. Robins, Butram, Petty, Slater
CRR #58

Feb 20, 1951 C. b. bartoni 1 ♀ imm.
176187

(1)

70

✓

DWC Coll 69
July 13, 1950

N.Y., Broome Co., Susquehanna Dr., Nanticoke Cr. 1/4
mi. above trib. 20.

Water: white, clear

Flow: 1 cfs

Current: slow

Temp: A 79.5 W 71.5

Bottom: rubble silt

Shore: pasture hollows

Depth: 3"-2'

Method of capture: 120V shocker

Time: 1430

Orig. Pres.: 10% form

Coll.: CR Robins (coll 60), Petty, Putnam, Slater

Feb. 20, 1951

C. B. Barton

1 ♂ imm.

176188

(1)

71

DWC Coll 70
July 16, 1950

N.Y., Chenango Co., Oxford quad., Susquehanna Dr.,
Chenango River. 2 mi. N.E. Oxford

Water: white, sl. turbid

Flow: 250 cfs

Current: med.-fast. width 50'

Temp: 84 W 69

Bottom: rubble Veg. Potamogeton, Vallisneria, Elodea,

Shore: woods + pasture

Spartanum americanum

Depth: 4'

Method capture: 10' seine

Time: 1505

Org. pres. 10% form.

Coll. C.R. Robins (coll # 61), Ed Putnam

Feb 20 1951 *O. limosus* 1 ♀

176189

①
72 ✓

DWC Coll # 71

July 24, 1950

N.Y., Herkimer Co., Mohawk-Hudson Dr., Moyer
Cr. at bridge $\frac{3}{4}$ mi. below trib 9. Approx. 1 mi. S. Gulph.

Water: white clear

Flow: 5 cfs

Current: mud

Bottom: rubble

Width: 8'-12'

Shore: pasture

Depth: 4"-1.5'

Temp.: A 70 W 62.5

Method capt.: 120V shocker

Orig Pres: 10% farm.

Coll.: CR Robins (coll 64)

Feb. 20, 1951 C. robustus 1 ♀ (imm.?)

176190

①

73

✓

N.Y., Tompkins Co.

Discarded

This collection consists of 21 animals of an original 23 (2 were discarded) which were collected in various localities at various times and were used as experimental animals. A data sheet for each of these follows. Each animal in the bottle is tagged with its number.

In summary, these animals are:

1. *O. p. propinquus* ♀, Cascadilla Cr., May 16.
2. *C. robustus* ♀ 1mm., Fall Cr. Apr. 28. } originally
3. *O. p. propinquus* ♂ 1mm., Fall Cr. Apr. 28. } Coll. 39
4. *C. robustus* ♀, Cascadilla Cr. May 16. } (part)
5. *O. i. immunis* ♀, C. U. Fish Hatchery June 26.
6. " ♀ " " "
7. " ♂ I " " "
8. " ♀ " " "
9. " ♂ II " " "
10. } discarded
11. } discarded
12. *O. i. immunis* ♀ 1mm. " " "
13. " ♂ 1mm. " " "
14. " ♂ 1mm. " " "
15. " ♀, Ditch on Elmira Rd. near Ithaca, July 17.
16. *C. robustus* ♀, Cascadilla Cr., July 18.
17. *O. p. propinquus* ♀, " " "
18. *O. i. immunis* ♀, Cascadilla Cr. Ditch on Elmira Rd., July 17.
19. " ♀ " " " (over)

20. *O. i. immunis* ♂I, Ditch on Elmira Rd. near Ithaca, July 17.
21. " ♀ " "
22. " ♂II " "
23. *C. robustus* ♀ with young, Fall Cr. at Forest Home, Aug. 13.

DWC Coll. 73
Sept. 14, 1950

N.Y., Westchester Co., Saw Mill River.

Coll. H. + E. EVANS.

March 28, 1951 - O. limosus 1 ♂ I
1 ♀
4 ♂♂ imm.
4 ♀♀ imm.

176713

~~♂~~

10 specimens

10

✓
74

DWC Coll. 74
April 1940
Coll. ?

N.Y., Tompkins Co., Ithaca.

C. b. bartoni 1 ♀ with 7 young Ident. March 1951
Young passed thru alcohols + xylene, dried + mounted.

176269

(1)

✓
75

DWC Coll. 75

April 13-14, 1951

Crayfish used in reduced O₂ toleration experiments. Orig. pres. 80% alc.

Coll 75a N.Y., Tompkins Co., Fall Cr. at Forest Home.

Coll. DWC, G.C. Cole & others (6 in all), 4:45 PM - 5:45 PM on April 13. Two seines working for 1/2 hour. Coll. on April 14, DWC & 3 others working 2 seines 8:15 AM - 9:00 AM.

C. robustus with 6 young taken April 13. Five young lost, 1 passed through alcohol, xylene, dried & mounted.

O. p. propinquus with eggs taken April 13.

O. p. propinquus 12 ♂♂ I (11 small, 1 med.), 4 ♂♂ II or imm.,
1 ♀ with eggs, 4 ♀♀, 4 ♀♀ imm.

176169

(25)

C. robustus 4 ♂♂ I (smallest 34.0 mm (T.H.L.)), 1 ♂ imm.,
9 ♀♀, 2 ♀♀ imm.

176170

May 11, 1951 - Ident.

(16)

Coll 75b N.Y., Tompkins Co., Experimental ponds at Cornell Univ. Fish Hatchery. Coll. Milton Polash, G.C. Cole & others, April 13!

O. i. immunis

25 ♂♂ I (Smallest (T.H.L.) 24.2 mm., 9 others about 25-26 mm.)

46 ♂♂ imm. (largest 5: 23.8, 23.2, 22.2, 21.4 + 19.7 mm.)

1 ♀ (33.9 mm.)

20 ♀♀ with eggs (smallest 5: 29.4, 26.9, 26.8, 27.9 +

67 ♀♀ imm. (largest 5: 24.2, 23.0, 22.6, 22.3 + 22.0 mm.)
25.3 mm.)

176171

159 specimens in 75b

Ident. May 11, 1951

(159)

(200)

DWC Coll 76

Oct. 6, 1940

Coll. ?

N.Y., Tompkins Co., Lower Fall Cr. (as listed on original label glued to outside of jar).

Ident. June 16, 1951

C. robustus 1180 mm., 690 mm.

175704 range of CTGL = 17.1 - 27.8 mm.

(17)

✓
27

DWC Coll. 77
April 22, 1951
DWC + I. Huber

N.Y., Tompkins Co., Buttermilk Cr. at Robert Treman
State Pk., below point where stream crosses over
the road.

Ident. June 16, 1951

C. b. bartoni

175726

2 ♂♂ II or imm.

4 ♀♀ (Cth. Ls. 33.4, 31.7, 31.0 + 30.3 mm.)

2 ♀♀ (imm.?)

1 vial of young from the abdomen of one
of the large ♀♀.

Coll 59 from same place.

DWC Coll. # 78
April 27, 1951
Coll. E. Deubler Jr.

N.Y., Tioga Co., Hartford quadrangle, Susquehanna
drainage, Ouzego R. at Richford.

Water: clear & white

Flow: 250 cfs

Width: 20'-40'

Veg: sparse, algae

Bottom: rubble

Current: Med.

Shore: Open

Temp.: A. 67°F, W. 54°F. at 4:30 PM

These are only crafish taken (except 1 lost)
in 40 min. working 10' seine (3:40 - 4:20 PM).

C. b. bartoni 1♂I, 2♂♂II, 2♀
175715

(5)

✓
70

DWC Coll. #79

May 3, 1951

Coll. DWX + E. Deubler Jr.

N.Y., Boundary line: Tompkins + Schuyler Cos.,
Taughannock Cr. at road leading into Perry City
from the East. (Same locality as DWC Coll. 65).

Working 10' seine for 1 hour. 80% alc.

Width 25-30', Depth 6" - 2.5'

Bottom rubble + gravel, Banks pasture, willows,
Water white + very clear.

Seined about 100 yds downstream from bridge.

Ident. June 16, 1951

C. robustus 3 ♂♂ I (Smallest CThL = 35.1 mm.)

5 ♂♂ imm. (largest 2 CThL = 30.9 + 29.5 mm)

10 ♀♀

15 ♀♀ imm. (largest CThL = 30.3 mm.; Smallest
= 11 mm.; rest 20-25 mm.)

176193

33 specimens

Branchiopodellids sent to Hobbs Nov. 5, 1951

33
✓
80

DWC Coll. ~~1180~~ 80
May 4, 1951
EC Ramey (#1964)

N.Y., Tompkins Co., Enfield Cr. at lower Enfield
park. At Geol. Survey dam. Runs into Cayuga
Inlet.

Water: clear, white; Flow: 30cfs; Current: mod.;
Bottom: gravel & algae covered rubble; Width: 10-25';
Depth of coll.: to 3'; Depth water: to 5';
Temp. W 54, 60, 61 A 67; 10' seine, 10% form.

Ident. June 16, 1951

C. robustus 1 ♂ I
2 ♂♂ II or imm. (CtH.L. = 33.5 + 33.0 mm.)
2 ♂♂ imm.
3 ♀♀ (largest CtH.L. = 52.0 mm.)

8 specimens

Branchiobdellids to Hobbs Nov. 5, 1951

8

DWC Coll. ~~58~~ 81
May 5, 1951
Coll. DWC, Al
Gustafson + 6
others

N.Y., Boundary line: Tompkins + Schuyler Cos.,
Taughannock Cr. at rd. leading into Perry City
from the East. (Same locality as Colls. 65 + 79).
From bridge to 150 yds. downstream. Most
taken in last 50 yds (the region from which
I have not seined before).

Ident. June 17, 1951

Coll. 81a. C. robustus 1 ♀ Molted May 24, 1951

CTH L. of animal - 37.6 mm.

" " " moult - 35.1 mm.

2.5 mm Increase

175595

①

Coll. 81b. C. robustus 13 ♂♂ I (CTH.L. = 33.5, 34.2, 34.9, 35.4,
34.4, 36.9 (found dead), 36.3, 33.1,
33.7, 35.4, 32.3, 31.0 (rostrum damaged),
35.7)

2 ♂♂ II (CTH.L. = 40.5, 35.1)

1 ♂ II or imm. (CTH.L. = 32.0)

11 ♀♀ (CTH.L. = 43.2, 40.7, 36.8, 40.8, 39.4,
34.7, 34.5, 34.2, 35.4, 32.8, 35.5)

3 ♀♀ imm. (CTH.L. = 31.0, 27.5, 26.9) ③①

176191

Coll 81a was kept at Stinson Hall until a few days after
moulting when it was killed + preserved. Coll. 81b was
kept in the a trough at the fish hatchery for a couple of
weeks before killing. ③②

JWC Coll. 82
May 6, 1951
Coll. JWC + Tom Donnelly

N.Y., Steuben Co., Chemung R. about 200 yds.
above bridge just before entering city of
Corning from the East on rt. 17.

Water: white & clear, fast; Depth 3';
Width 250'; Bottom: boulders & rubble.

10' seine, 1/2 hr. coll., 80% alc.

Ident. June 17, 1951

175596 Oreometes sp. ^{obscurus} 1♀ with eggs.

Carpopodites of chelae have ^{ventral} tubercles and spines,
but rostrum has a low median carina. Annulus
a combination of O. obscurus + O. propinquus: the
anterior knobs of obscurus are present as
ridges as sometimes occurs in propinquus, but
are higher.

Branchiobdellids to Hobbs Nov. 5, 1951

①

✓
53

DWC Coll. 83

May 6, 1951

Coll. DWC & Tom Donnelly

N.Y., Steuben Co., Canisteo R. just above its junction with Tioga R. and just S. of town of Erwins. To 75 yds downstream of bridge on rt. 15.

Water: white & clear, slow-mod.; Depth 6"-2'; Width 30'; Bottom: rubble.

10' seine, 1/2 hr. coll., 80% a/c.

O. p. propinquus Ident. May 12, 1951

175805

13♂♂I

108♂ mm.

1♀

3 ♀♀ with eggs (smallest 20.4 mm. ET4.6.)

2 ♀♀ mm.

June 17, 1951. This collection shows some obscure affinities, a few specimens have V. spines on the carapacite of the chela and the annuli of some ♀♀ have rather elevated ridges. One ♀ on the basis of annulus alone I would call obscure, but all specimens have a recognizable ventral carina & all ♂♂I lack the distinctive right-angled shelf although as in Tompkins Co. material there are some specimens showing a trace of it.

The spines on the inner border of the mesopodite are consistently small and are rather innumerable tubercles.

Branchiopods to Hobbs Nov. 5, 1951

(29)

54

DWC Coll. #4
May 6, 1951
Coll. DWC + Tom Donnelly

N.Y., Steuben Co., Cowanesque R. just above its
junction with Tioga R. Near N.Y.-Pa. state line
100' below bridge on rt. 15. No crayfish in
riffle 50yds. further downstream.

Water: white + slightly turbid, slow-med.;
Width 30'; Depth 3'; Bottom: boulders + silt.
10' seine, 1/2 hr. coll., 80% ac.

O. p. propinquus Ident. May 11, 1951

488PI
175806 1 ♀? with eggs. Has hook on ischropodite of
left 3rd pereopod, and normal sized
although aberrantly shaped stylets. Genital
openings on 3rd pr. legs.

June 17, 1951 The males are good propinquus in the armature
of the chelae. The ♀, however, has on each
chela, the ventral tubercle of the ~~car~~ carpopodite and
its annulus tends toward obcurus.

Branchiobdellids to Hobbs Nov. 5, 1951

(5)
✓
53

DWC Coll. 85

May 6, 1951

Coll. DWC & Tom Donnelly

Pa., Tioga Co., Cowanesque R. at W. limits of town
of Westfield.

Water: white & clear, mod.; Width 40';

Depth 1-2'; Bottom: boulders & rubble.

10' seine, 1/2 hr. coll., 80% ale.

Many minnows lacking 1 or both eyes here,
particularly Campestris anomalum. Took two
males of this sp. with breeding tubercles.

C. L. Barton 1 ♂ min.

May 11, 1951

Branchiobdellids to Hobbs Nov. 5, 1951

176270

(1)

1/2

DWC Coll. 86

May 6, 1951

Coll. DWC + Tom Donnelly

Pa., Potter Co., Middle Br. of Genesee R. at
Gold.

Water: white & clear, mod.; Width 10';

Depth 1 - 1.5'; Bottom: a few boulders and
rubble & silt.

10' seine, 20 min. coll., 80%

175597

C. b. bartoni 1♂II, 1♀, 1♂ (very small)

May 11, 1951

Branchiobdellids to Hobbs Nov. 5, 1951

(3)

✓
87

DWC Coll. 87

May 6, 1951

Coll. DWC + Tom Donnelly

Pa., Potter Co., Genesee R. just below entrance
of West Br., at bridge in town of Genesee.

Water: white + clear, mod.; width 40';

Depth 1-2 feet; Bottom: rubble overgrown with algae.

10' seine, 25 min. coll., 80% alc.

175598

May 11, 1951 O. obscurus ♀ with eggs.

June 17, 1951 Carapodites of chelae ^{with} V. tubercul.
but no spine. Meropodites with inner
border of low tubercles only - no spines.

Branchiellid to Hobbs Nov. 5, 1951

(1)

✓
556

DWC Coll. 88
May 6, 1951
Coll. DWC + Tom Donnelly

N.Y., Allegany Co., Genesee R. just before
entering city of Belmont from S. on rt. 19

Water: white + slightly turbid; Depth 2-4';
Width 100'; Current mod.; Bottom: rubble,
boulders + silt.

10' seine, 30 min. coll., best luck seining fast
downstream. 88% alc.

June 17, 1951 *Q. obscurus* 5 ♂♂ I
5 ♂♂ imm.
1 ♀ imm.

May 11, 1951

175599

Branchiopods to Hobbs Nov. 5, 1951

(11)

89

DWC Coll. 89

May 6, 1951

Coll. DWC & Tom Donnelly

N.Y., Allegany Co., 1/2 mi. upstream in Genesee R.
from Fillmore.

Water: white/clear, med.-fast; width 150';
Depth 2-3'; Bottom: boulders (large flat slabs).

10' seine, 1/2 hr. coll., 80% ak.

175807
175808

~~175807~~ C. robustus 1 ♂ I

Ident.

~~175808~~ O. obscurus 3 ♂ I, 1 ♀ imm.

May 11, 1951

Branchiobdellids to Hoth, Nov. 5, 1951

(5)

✓
90

DWC Coll. 90

May 6, 1951

Coll. DWC + Tom Donnelly

N.Y., Wyoming Co., Genesee R. at Portageville,
downstream from bridge on S. bank of river.

Water: white + clear; Width 150-200';
Depth 2'; Bottom mostly flat bedrock, crayfish
from under flat slabs; Current: mod.-fast.

June 17, 1951 - O. obscurus 7♂♂ I (smallest CTGL = 20.3 mm.)
1♂ II (CTGL = 24.2 mm.)
3♀ imm. (largest CTGL = 19.0 mm.)

175809

pranchobdellids to Kotte Nov. 5, 1951

(11)

✓ at

DWC Coll. 91

May 6, 1951

Coll. R.L. Wigley (#262)

N.Y., Oswego Co., Scribe Brook (a trib. of Oneida R.)
at N.Y. State Fish Hatchery dam at Constantia.

June 28, 1951 C. robustus 5♂♂I (smallest CThL = 36.4 mm.)

1♂II (CThL = 39.2 mm)

~~799~~ (2 small: CThLs = 33.0 mm
31.3 mm.)

176172

→
13 specimens

Branchiostellula to Hobbs Nov. 5, 1951

(13)

✓
92

DWC Coll # 92
May 12, 1951
Coll. Robins, New, Dickerman
CRR 80

N.Y., Allegany Co., Alleg. dr., trib. of Oswayo Cr.,
3/10 mi. W. of Cires on rt. 17 [Bells Bk.]

Water: white, sl. turbid; Flow: 10 cfs;
Width: 2-5'; Veg: none; Bottom: rubble;
Current: mod; Shore: partly wooded;
Temp: A 49, W 46 at 0900; Depth: to 1 1/2';
10' seine, 10% form.; Time of coll. 0825-0900.

June 28, 1951: C. robustus 3 ♀♀ (5)
175812 288 mm.

175811 C. b. bartoni { 1 ♂ II (slightly over 25 mm (74. L.) (4)
2 ♀
C. robustus x C. b. bartoni? } 1 ♀ claws tend toward robustus;
tagged eyes " " " ;
punctations in areola bartoni-like;
lat. tubercles, but no spines; rostrum
intermed.

O. obscurus 1 ♂ I (no lateral spines on rostrum,
175810 mesal process of stylets divided
mesad at tips - 45° L.)
1 ♂ 1 mm.
6 ♀♀ 1 mm (8)

DWC Coll # 93

May 12, 1951

Coll. Robins, New, Dickerman

CRR 82

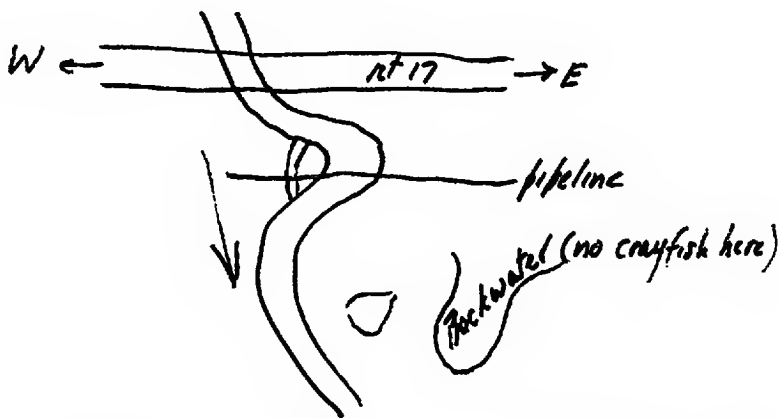
N.Y., Cataraugus Co., Alleg. dr., trib. of Allegheny R.
at Weston Mills on rt. 17 (W. limit of City) [Haskell Cr.]

Water: white, clear; Flow: 40 cfs;
Width: 15-25'; Veg: little; Bottom: rubble,
mud, detritus; Current: slow-mod.;

Shore: open, second growth; Temp. A48, W48 at 1225

Depth: to 5'; 10' seine, 10% Form.;

Time of coll. 1110 - 1225.



June 27, 1951 C. robustus 2 ♀♀ imm. (~~one~~ one 9.4mm. CTk.L., both soft)

175600
175601

O. obscurus 4 ♂♂ imm. } small
4 ♀♀ imm. }

10

a4v

DWC Coll. # 94

May 12, 1951

Coll. Robins, New, Dickerman
CRR 83

N.Y., Catawagus Co., Alleg. cr., Trib. of Allegheny R.,
5 4/10 mi. W. of Allegany (town of).

Water: white, sl. turbid; Flow: 45 cfs; Current: swift;
Width: 5-15'; Depth: to 3 1/2'; Bottom: rubble,
detritus; Shore: open; Temp: A56 W48 at 1335;
10' seine, 10% form; Time of coll. 1310 - 1335.

June 27, 1951

C. robustus

499

175813

2 ♂ 1mm.

1 ♀ 2.9mm. } small

O. obscurus

388 I

175814

2 ♂ 1mm.

1 ♀ 1mm } small

(B)

45 ✓

DWC Coll. #95

May 12, 1951

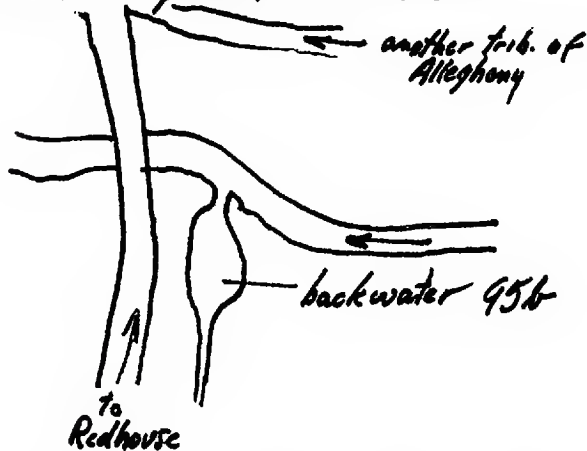
Coll. Robins, New, Dickerman
CRR 84

N.Y., Cataraugus Co., Alleg. dr., trib. of Allegheny R.,
9/10 mile S. of Redhouse on unmarked rd. (not
tourist rd. into park). [Near mouth of Redhouse Bk.

Water: white, clear; Flow: 50 cfs; Current: slow-fast;
Width: 10-15'; Depth: 3'; Bottom: rubble, silt;
Shore: wooded; Temp: A 64, W 56 in stream, 55 in
backwater at 1530. 10' seine, 10% form.

Time of coll. 1430 - 1530.

Backwater the deepened end of a small spring trib.,
Elodea etc. present in abundance.



95a 15107
stream

(20)

✓

June 27, 1951 #95a C. robustus 2♂♂ (CT&Ls 39.4 & 33.1 mm)
 15 ♂♂ 1mm. (all under 30 mm.)
 3 ♀♀ (1 CT&L. = 51.4 mm)
 19 ♀♀ 1mm. (all under 30 mm.)

176200 C. b. bartoni 2 ♀♀ 1mm. (tagged)

(6)

(over)

956. June 28, 1951 C. robustus

176196

(9)

3♂♂ (over 30mm CTh.L.)

2♂♂ 1mm (one CTh.L. = 18mm)

2 ♀♀ (under 30mm CTh.L.;)
one = 16mm.

176197

C. b. bartoni ²ij♀

(2)

1♂ 1mm

1♀ 1mm

} tend toward robustus in
chelic, rostrum L., & punctations
in areola.

176198

O. obscurus

(9)

3♂♂ 1mm.

6♀♀ 1mm.

} small, approx. 12mm.
CTh.L.

DWC Coll # 96
May 12, 1951
Coll. Robins, New, Dickerman
CR1286

N.Y., Catawagus Co., Alleg. dr., Trib. of Allegheny R.,
8 9/10 mi. SW of Red House on unmarked rd. to
Onoville. [Hatchkiss Hollow Bk. - E6 of Allegheny]

Water: white, clear; Flow: 75 cfs; Current: med.-fast;
Width: 10-15'; Depth: to 6'; Bottom: rubble;
Shore: Second growth; Temp. A61 W55 at 1745;
10' Seine, 10% form. Time of coll. 1705-1800.

(about midway between Quaker Bridge and Onoville,
alternate riffles & pools, deep on cut banks)

June 28, 1951 C. robustus 1♀
175602 1♀ 1mm (C7h6. 16.2 mm, shows lat. spines)

175603 C. b. bartoni { 2 ♂♂ II
2 ♂♂ 1mm.
3 ♀♀ (punct. in areola as in C. robustus;
small lat. spine rt. side in 1 specimen)
2 ♀♀ 1mm.

Most of the C. b. bartoni show some inclination toward
C. robustus.



Collections of May 13, 1951 (following 6
collections)
97-102

#1. Below flood control dam (1/2 mi.) at Arkport.
Canisteo R.

#2 Oakland - no crayfish
Semotilus in breeding color; near full.

#2a Letchworth State Park below upper
falls - no crayfish

#3 Cuylerville ripples in mud, talked to man
just E. of Leicester, trib. of Genesee about crabs
no crayfish

#4 Cuylerville - Genesee, deep, some rocks at
base of bridge
no crayfish

#5 Outlet Conesus L. at bridge on Rt 39, 1 1/2 mi
SSW of Avon Fast water, crayfish
under rocks at edge.

6. Le Roy Oatka Cr., no crayfish.
near planing mill, below low
dam, bar in middle of stream

7. Stafford Black Cr. hand picking

8. Black Cr., Churchville below large
(15' dam) boulders + rubble covered
with algae. People fishing,
packed at fire stu.

Tails used as bait for
catfish

9. Rochester - Genesee R.

Got a Procambarus from a bait dealer: The Swap Shop,
666 Clinton Ave., Rochester. Says they are shipped to a wholesaler
from Ia. but are called Texas Crabs. Says O. i. immixtus called
grass crab or paper shell. All the rest = rock crabs (Orconectes +
Cambarus)

10. Rush - Outlet Horseeye L.

DWC Coll. # 97

May 13, 1951

Coll. DWC + Al Gustafson

N.Y., Steuben Co., Susquehanna Dr., Canisteo R.
at W. limits of Arkport on rt. 70. 1/4 mi.
below flood control dam.

Water: white + clear; Width 25'; depth: to 2 1/2';

Bottom: boulders + rubble; current: mod.

Coll. 1/2 hr. with 10' seine.

June 27, 1951

C. b. bartoni

3 ♂♂ II

1 ♂ imm.

175815

4 ♀♀

Branchedellids to Watts Nov. 5, 1951

(8)

214

DWC Coll. 98

May 13, 1951

Coll. DWC + John A. (AI) Gustafson

N.Y., Livingston Co., Outlet of Conesus Lake at
bridge on rt. 39, 1 1/2 mi. SW of Avon.

Water: white + clear; Width: 20'; Depth: to 3';
Bottom: boulders + rubble; current: mod-fast.
Coll. 1/2 hr. with 10' seine.

June 28, 1951 C. robustus 1 ♂ I

1 ♂ II

4 ♂♂ 1mm.

4 ♀♀

1 ♀ 1mm.

(11)

175591

175592 C. t. bartoni

1 ♂ 1mm.

(1)

175593 O. p. propinquus

11 ♂♂ I (largest CTh.L. = 26.7 mm.,
smallest = 17.8; mostly
small individuals)

1 ~~♂~~ ♂ II (CTh.Ls 18.8) ~~and 4.7 mm~~

7 ♀♀ 1mm (largest CTh.L. = 17.5 mm)

1 ♂ 1mm (14.7 mm.)

(20)

Branchiobdellids to Hatto Nov. 5, 1951

(30)

DWC Coll. #99
May 13, 1951
Coll. DWC + J.A. Gustafson

N.Y., Genesee Co., Black Cr. at Stafford, 100 yds
W. of junction of rts. 5 and 237 on rt. 5.

All crayfish from 200 ft. of stream below bridge

Water: white + sl. turbid; Width 10-15';

Depth: to 3'; Bottom: Boulders, rubble + silt;

Current: slow; Coll. 1/2 hr., hand picking along
rt. bank of stream under boulders.

June 28, 1951 C. robustus 18 I

175584

3 ♂♂ II

(5)

1 ♀ imm. (soft)

O. obscurus

175585

19 ♂♂ I (largest CR.L. = 36.0 mm)
Smallest = 26.3

3 ♂♂ imm. (largest CR.L. = 20.2 mm.)

4 ♀♀ with eggs (smallest CR.L. = 28.3 mm)

2 ♀♀ (CR.L.s = 27.7 and 28.0 mm)

2 ♀♀ imm. (largest CR.L. = 15.0 mm)

(30)

Branchiobdellids to Holte Nov. 5, 1951

(35)

101

DWC Coll. 100

May 13, 1951

Coll. DWC + J.A. Gustafson

N.Y., Monroe Co., Black Cr. at Churchville.

Coll. in 100' of stream about 200' below dam, from under bridge (rt. 33) to 100' below bridge.

Water: dark + sl. turbid; Width: 35';

Depth: to over 3½'; Bottom: boulders;

Current: mod-fast; Coll. ½ hr., 10' zone, along left shore to 2½' depth.

June 29, 1951

O. p. propinquus

175817

14 ♂♂ I (largest Cth.L. = 37.5 mm.,
Smallest = 17.0 mm., most specimens
about 30-32 mm.)

2 ♂♂ II (Cth.L. = 26.3 and 21.0 mm.; both
with large V. spines on carapace of
chela - larger even than any *O.*
obscurus I have seen - as large as
in *O. (immosus)*; stylets as in *propinquus*,
rostral carina present)

1 ♀ (Cth.L. = 30.5 mm)

175816

C. robustus

1 ♀ 1 mm.

Some of the ♂♂ I have well devel. tubercles on carap. of chela.

Branchiostelido to Hobbs Nov. 5, 1951

18
✓
10/2

DWC Coll. #101

May 13, 1951

Coll. DWK & J.A. Gustafson

N.Y., Monroe Co., Genesee R. within city limits of
Rochester, at foot of Fraternity Rd. at Mens
College, Univ. of Rochester. In main stream on
rt. shore, ^{for 150'} not in lagoon (only 1 specimen taken here).

Water: white & turbid; Width: 200 yds.; Depth:
collected to 3 1/2 ft.; Bottom: silt (mud) & scattered
boulders; Current: slow; coll. 1/2 hr., 10' seine.

June 29, 1951

O. p. propinquus:

175586

6♂♂ (5 large - largest (TL) = 37.1 mm;
1 small - " = 17.8 mm.)

1 ♂ imm. (CTCL = 20.5 mm.)

1 ♀ (CTCL = 20.8)

Branchiobdellids to Noble Nov. 5, 1951

(8)

✓
103

DWC Coll. 102

May 13, 1951

Coll. DWC + J.A. Gustafson

N.Y., Monroe Co., Outlet of Honeye Lake at Rush.
Between bridge on rt. 15A and dam along rt. shore.

Water: White + sl. turbid; Width: 40'; Depth:
coll. to 3'; Bottom: rubble, trash, black odorous
muck among boulders at bridge.; Current: mod;
Coll. 1/2 hr., 10' seine.

June 29, 1951

O. p. propinquus

23 ♂♂ I (largest Ctl. l. = 35.5 mm.,
Smallest = 19.8 mm.)

6 ♂♂ imm. (1 clean)

3 ♀♀ with eggs (largest Ctl. l. = 35.9 mm.,
Smallest = 19.4 mm.)

3 ♀♀ (small, 2 soft)

1 ♀ imm.

Planorbelloids to Hobbs Adv. 5, 1951

176194

✓ (36)
104

DWC Coll. 103
May 18, 1951
E.C. Raney + Ichthyology
class.

N.Y., Tompkins Co., Moravia Quadrangle, Elev. 1100',
Owasco Inlet 3mi. S. of Groton.

Water: white, clear; Depth coll.: to 3'; flow: 15-20 cfs;
Current: slow; Bottom: silt, rubble in riffles.
Temp. W62, 173; 10' Seine, 10% form.

July 2, 1951

(Put in 2 jars) C. robustus

176205 {
4 ♂♂ I (CTH Ls. 50.3, 44.6, 40.5 + 38.2 mm)
6 ♂♂ II (4 are 35-40 mm., other 2: 49.2 + 42.5)
5 ♂♂ II or imm. (30-35 mm.)
3 ♂♂ imm. (1 soft)
8 ♀♀
8 ♀♀ (imm.?) - between 30 + 35 mm.
5 ♀♀ imm. (2 soft; smallest 13.3 mm.) (39)

O. p. propinquus

175716 {
4 ♂♂ I
1 ♂ imm.
1 ♀ imm. (6)

Branchioidellids to Abbe Nov. 5, 1951

(45)
10
✓

DWC Coll. 104
May 19, 1951
Coll. Tom Donnelly

N.Y., Schuyler Co., Catherine Cr. at Montour Falls,
at point where N.Y. rt. 224 crosses the creek.

Bottom: pebble + rock; Current: medium.

July 2, 1951 C. robustus

175605

1 ♀ 1mm.

O. p. propinquus

2 ♂♂ I (small)

2 ♂♂ II (small)

2 ♂♂ II or 1mm.

2 ♀♀ 1mm.

2 ♀♀ (small)

1 ♀ (1mm.?)

3 ♀♀ 1mm.

175606

(15)

100 ✓

Trip of May 19-21, 1951

Localities which produced no crayfish.

1. Hudson R. in Essex Co., 1.5 mi. E. of Newcomb. Tried right bank below bridge at rt. 28 N and left bank (near road) of the pond-like expansion of the river. Left bank - silt + aquatic veg., no current; right bank, fast water, boulders.
2. Awable R. at Keeseville, just before river enters chasm. Large boulders.
3. Rousseau Point. Bay at beginning of bridge to Vermont. Silt and scattered boulders.
4. S. edge of Raquette Lake about 1 mile before coming to S. inlet (1 mi. W. of S. inlet). Organic debris piled up here knee deep.
5. St. Regis R. at Higanahung. 200 yds downstream from dam. boulders + rubble. Quiet backwater with no current. 1 crayfish seen.
6. Grass R. at Massena. Below dam. W. 60', Depth of coll.: to 2'; Current: mod. (fast in riffle where lots + worms taken. Water: dark + sl. turbid. Bottom: bedrock strewn with boulders + rubble.

7. Raquette R. at town of Raquette Raquette River.
Right bank below bridge (rt 37.)
Steep muddy bank & grassy emergent veg.
8. ^{Trib. of} Odongatchie R. about 1 mi. SE of Gouverneur
on rt. 58. Upstream of bridge. Boulders
encrusted with dead lichens. Depth: to 3.5'.
9. Independence R. at ~~season~~ downstream
from crossing of unmarked rd. About
3 mi. NE of Glenfield. Large boulders,
most couldn't be moved. Fast water.
10. Little Chazy R. at mouth along left bank
at mouth & along shore of L. Champlain
on this side of outlet for 100'. grassy
emergent veg. on silt bottom.

DWC Coll. 105

May 19, 1951

Coll. DWC & John A. Gustafson

N.Y., Oneida Co., Nine mile cr. at South Trenton.

Upstream of bridge (rt. 12).

Width: 10'; Depth: to 1.5'; Bottom: algae covered rubble + boulders; Water: white + clear.

July 3, 1951

O. obscurus

4 ♂♂ I

4 ♂♂ II or imm.

4 ♂♂ imm.

3 ♀♀ (imm.?) - 2 soft

4 ♀♀ imm.

175587

Branchiopodella to Hobbs Nov. 5, 1951

19

DWC Coll. 106

May 19, 1951

Coll. DWC + John A. Gustafson

N.Y., Oneida Co., Black River at Forestport, below
dam. (between dam + rd. crossing).

Water: dark + clear; Width: 75' (total W. of 2
channels + island), Depth of coll.: to 4';

Bottom: boulders, rubble + gravel; Current: mod. to
fast.

July 3, 1951

O. obscurus

4 ♂♂ I

1 ♂ II (24 mm)

1 ♂ imm.

1 ♀ imm.

175604

(1)

✓
109

DWC Coll. 107

May 19, 1951

Coll. DWC + John A. Gustafson

N.Y., Herkimer Co. (near county line - Herkimer + Lewis Cos.),

Moose R. at McKeever at crossing of rt. 28 + 365.

Distance of 100 yds below bridge.

Width of stream bed 150', width of stream 40';

Water: dark + clear; Current: mod.; Bottom:

gravel, sand, some boulders, most crayfish from under
sunken logs (from mill at dam 4 or 500 yds upstream).

July 3, 1951

176173

O. p. propinquus 1 ♂ I

(1)

176174

C. robustus

2 ♂♂ I (med. size)

4 ♂♂ II (approx. 35mm.)

5 ♀♀

1 ♀ imm.

(17)

Branchiobdellids to Hobbie Nov. 5, 1951

Dit Coll. 108

May 19, 1951

Coll. W.C. + John A. Gustafson

N.Y., Herkimer Co., Outlet of Fulton Chain of Lakes →
Moose R. at Old Forge at crossing of rt. 28+365.
Hand collecting for about 100' from a point
200' below dam.

Water: slightly dark + turbid; Depth: to 5';

Bottom: boulders, silt, rubble + trash; Current: slow.

July 3, 1951

C. robustus

176162

1 ♂ I (45 mm.)

1 ♂ II (44.7 mm.)

3

1 ♀

C. b. bartoni

176163

1 ♂ II (36.3 mm.)

1 ♀ (38.8 mm.)

2

O. p. propinquus

176164

7 ♂♂ I (6 large, 1 - 21 mm.)

11

4 ♀♀ with eggs (large)

(1 ♀ has yellowish encrustation on
hairs around openings of oviducts)

(16)

111

DWC Coll. 109

May 19, 1951

Coll. DWC + John A. Gustafson

N.Y., Hamilton Co., South inlet to Raquette L. at
crossing of rt. 28 + 365. Under, 50' below + 50'
above bridge.

Water: dark + sl. turbid; Current: slow; Width:
30'; Depth: to 4'; Bottom: silt.

July 4, 1951

a. p. propinquus

175819

4♂♂ I
1 ♀ with eggs
2 ♀♀ 1mm.

①

4/2

DWC Coll. 110

May 19, 1951

Coll. DWC & John A. Gustafson

N.Y., Hamilton Co., Loon Bk. at crossing of rt. 28 + 365,
3.3 mi. W. of town of Blue Mtn. Lake.

Water: sl. dark + clear; Current: mod.; Width: 10';
Depth: to 2.5'; Bottom: boulders; Temp. W61, A75
at 2 PM.

July 4, 1951

C. robustus

175589

1 ♂ II (43.3 mm.)

1 ♂ II or imm.

1 ♂ imm.

2 ♀♀ (1 with ant. scale as in C. b. bartoni)

1 ♀ imm.

C. b. bartoni

175588

2 ♀♀ (22.5 + 21.0 mm.)

Branchiopoda to Bloth Nov. 5, 1951

8

DWC Coll. 111

May 19, 1951

Coll. by John A. Gustafson

N.Y., Hamilton Co., Small trib. of Long Lake at
mouth in town of Long Lake, just below bridge
at rt. ~~10+364~~ 10+365.

Water: ~~clear~~, white + sl. turbid; Depth: to 3.5';
Temp. of water: cold; Bottom: boulders, trash + silt.

July 4, 1951

O. obscurus

1 ♀ with eggs (25.5 mm.)

176271

①

✓
114

DWC Coll. 112

May 20, 1951

Coll. DWC + J.A. Gustafson

N.Y., Essex Co., Boreas R. 2 mi. NW of town of
Alden Lair at crossing of rt. 28 N.

Under bridge + 100' upstream. Water: sl. dark + clear;
Width: 25'; Depth: to 3'; Bottom: boulders + rubble.

July 4, 1951 C. robustus

1 ♂ I

175818

1 ♂ II or imm.

2 ♂♂, imm.

3 ♀♀

1 ♀ (imm.?)

Beauchamp killed to Holm Nov. 5, 1951

(8)

115 ✓

DWC Coll. 113

May 20, 1951

Coll. DWC & John A. Gustafson

N.Y., Essex Co., Bouquet R. at crossing of rt. 9,
between towns of Underwood & New Russia.

Water: white & clear; Width: 20'; Depth: to 2'
(4' in pool); Temp. W 54; crayfish in shallow
eddy, rubble bottom; Current: mod.

July 4, 1951

C. G. Barton

175607

288^{II} or imm.

(2)

115

DWC Coll. 114

May 20, 1951

Coll. DWC + John A. Gustafson

N.Y., Essex Co., L. Champlain at Westport.

Flooded beach area (picnic area with bath-houses etc.)
near outlet of a trib.

The one crayfish seen & taken was under a
piece of tin on sandy bottom in 1.5' of water.

July 4, 1951

O. p. propinquus

175608

1 ♀ with eggs (spine on carapodite of
R. chela)

①

117

✓

DWC Coll. 115

May 20, 1951

Coll. W.C. + John A. Gustafson

N.Y., Essex Co., Bouquet R. at Willsboro.

Water: sl. dark & turbid; Current: mod.; Width: 50';

Depth: to 3.5'; Bottom: boulders, rubble & trash.

July 4, 1951

O. p. propinquus

175825

181

(1)

115

DWC Coll. 116

May 20, 1951

Coll. DWC & John A. Gustafson

N.Y., Clinton Co., Salmon R. upstream for 50' from
crossing of rt. 9, 4.5 mi. S. of Plattsburg.

Water: white + sl. turbid; Current: mod.; Width: 20';
Depth: to 4'; Bottom: boulders + rubble.

July 4, 1951

C. b. bartoni

175826

1♀

(1)

ii⁹

✓

DWC Coll. 117

May 20, 1951

Coll. DWC + John A. Gustafson

N.Y., Clinton Co., Plattsburg quadrangle, small trib.
of Silver Stream (Lake Champlain T22).

[West on Salmon River road for 0.3 mi. from
r.t. 9, then 0.4 mi. S. on Lions (Lyons) St.]
at bridge crossing - 25' of stream length.

Water: ah. + turbid; current: slow; Width: 6'; Depth 8";
Bottom: rubble + silt.

July 4, 1951

C. b. bartoni

175827

2♂[♂] II or imm. (both soft)

1♀ imm.

120

✓

DWC Coll. 118

May 20, 1951

Coll. DWC + John A. Gustafson

N.Y., Clinton Co., Saranac R. at Plattsburg.
Left shore at foot of Pine Street.

Water: dark + sl. turbid; Current: mod.-slow at shore;
Width: 60'; Depth of coll.: to 2.5'; Bottom:
rubble, trash + silt.

July 4, 1951

C. G. Barton

175590

3 ♂♂ I (53.8, 36.7 + 27.7 mm.)

3 ♀♀

Branchiobdellids to Hobbs Nov. 5, 1951

(6)

121

DWC Coll. 119
May 20, 1951
Coll. DWL & John A. Gustafson

N.Y., Clinton Co., Little Chazy R. 200 yds from mouth
just downstream from bridge on unmarked rd. 3 mi.
SSE of Cooperville. Left bank.

Water: dark & turbid; Current: mod.; Width 50';
Depth of coll. on left bank: to 3.5'; Bottom: soft
deep silt & aquatic plants.

July 4, 1951

O. viridis

1 ♀ 1 mm.

176272

①

122

✓

DWC Coll. 120

May 21, 1951

Coll. DWC + John A. Gustafson

N.Y., Franklin Co., Chateaugay R. at crossing of
rt. 11, just W. of town of Chateaugay.

50' of stream upstream from bridge.

Water: sl. dark + clear; Width: 25'; Depth: to 2.5';

Bottom: rubble + scattered boulders.

July 4, 1951

C. b. bartoni

175828

1 ♂ I (21.4 mm.)

1 ♂ 1 mm.

2 ♀♀ (punct. in area of one like
C. robustus)

2 ♀♀ 1 mm.

Manchobdellina to Hobbie Nov. 5, 1951

①
123
✓

DWC Coll. 121
May 21, 1951
Coll. DWC + John A. Gustafson

N.Y., Franklin Co., Salmon R. at Ft. Covington.

To 75' upstream from bridge at crossing of rt. 37.

Water: sl. dark + turbid; Width: 35'; Depth: to 4';

Bottom: soft, deep silt + patches of Elodea.

Current: mod - slow.

No crayfish taken from riffle area with rubble
+ scattered boulders at upstream limit of seining.

July 4, 1951

O. viridis

175830

1 ♂ I (39.8 mm)

2 ♂♂ II or imm. (22.4 + 25.5 mm.)

2 ♀♀ (soft; 23.8 + 21.8 mm.)

175829

O. i. immunitis

1 ♂ I (32.6 mm.)

Branchiobdellids to Hothe Nov. 5, 1951

(6)

124
✓

Wat Coll. 122-a

May 21, 1951

Coll. W.C. & John A. Gustafson.

N.Y., St. Lawrence Co., Raquette R. at Raymondville.
Left bank below bridge on rd. leading to W. from rt. 56.

Water: dark & turbid; Width: 50'; Depth of coll.:
to 3'; Bottom: rubble, few boulders, silt & trash.

July 4, 1951

O. p. probingus

175831

8 ♂♂ I

1 ♂ II (soft)

1 ♂ imm.

1 ♀ (soft)



✓

DWC Coll. 122 b
May 21, 1951
Coll. DWK + John A. Gustafson

N.Y., St. Lawrence Co., Raquette R. at Raymondville.
Left bank below bridge on rd. leading to W. from rt. 56.

Stomach contents of large ♀ bullfrog with eggs.

July 4, 1951 O. p. propinquus

175609

2 ♂♂ I (entire; 25.4 × 26.0 mm.)

1 ♂ I (abdomen + stylets)

1 ant. carapace (no legs)

Seven chelae - probably Orconectes

(3)

1760

DWC Coll. 123

May 21, 1951

Coll. DWC + John A. Gustafson.

N.Y., St. Lawrence Co., Grass R. at Canton. Behind garage at trailer park in left of the 2 channels of the stream.

Water: white + clear; Width (of L channel): 25';

Depth: to 3'; Bottom: boulders + rubble.

July 4, 1951

O. p. brohmpus

175623

5 ♂♂ I

2 ♀♀ (soft)

1 ♀ imm.

Branchiobdellids to Hobbs Nov. 5, 1951

(8)

DWC Coll. 124
May 21, 1951
Coll. DWC + John A. Gustafson.

N.Y., Jefferson Co., Indian R. beside rt. 11, 3 mi.
SW of Antwerp.

Water: sl. dark + clear; Width: 25'; Depth: to 2';
Bottom: scattered boulders on rubble.

July 4, 1951

O. p. profimpus

1 ♂ I

175624

4 ♂♂ II

2 ♀♀

} Clean + white,
recently moulted

(7)

177
✓

DWC Coll. 125
May 21, 1951
Coll. DWC + John A. Gustafson

N.Y., Lewis Co., trib. of Black R. at New Bremen.
Downstream of bridge at rt. 26A.

Water: dark + sl. turbid; Width: 20'; Depth: to 3';
Current: med; Bottom: boulders.

July 4, 1951

O. obscurus 1♀ (24.8mm., tagged)

176203

C. robustus

6♂♂ I (2 smallest 32.8 + 32.0 mm.)

3♂♂ II

5♂♂ II or imm.

5♂♂ imm. (3 soft)

4♀♀

5♀♀ (imm.?)

7♀♀ imm. (2 soft; 2 smallest = 12 + 16 mm.)

176202

July 22 1951 Map 4c shows this to be Crystal Cr.,
t 45 of Black R.

Branchiostellata to Rotten Nov. 5, 1951

DWC Coll. 126

May 21, 1951

Coll. by John A. Gustafson

N.Y., Lewis Co., Otter Cr. upstream from bridge at
unmarked rd. 2 mi. E. of Glenfield.

Water: white & clear; Width: 20'; Depth: to 2.5';
Current: mod; Bottom: boulders & rubble.

July 4, 1951

C. robustus

175625

1 ♀ (imm.?)

175626

1 ♀ imm.

C. b. bartoni

1 ♂ II

Branchiopods to Rother Nov. 5, 1951

(3)

130
✓

DWC Coll. 127

May 21, 1951

Coll. DWC + John A. Gustafson

N.Y., Lewis Co., Outlet of Brantingham Lake, down-stream from bridge at unmarked rd., 3.5 mi. N. of Lyons Falls.

Water: ~~is~~ Sl. dark + clear; Width: 12'; Depth: to 2';
Current: mod; Bottom: boulders + rubble.

July 4, 1951

175627 C. robustus 1 ♂ I

175628 C. b. bartoni

1 ♂ I (28.0 mm.)

1 ♀

Pranchotdellids to Hobbs Nov. 5, 1951

(3)

1 ♀

✓

DWC Coll. 128

May 21, 1951

Coll. DWC & John A. Gustafson

N.Y., Lewis Co., Black R. just below entrance of
Moose R. at Lyons Falls.

Right bank of large pool below dam at paper
mill.

Water: dark & turbid; Current: slow; Width: 75-100';
Depth of coll.: to 3.5'; Bottom: boulders, rubble
covered with sludge waste from paper mill.

Only 1 crayfish (O. obscurus ♀ with eggs) taken,
2 other Aconectes sp. seen but escaped. One
dead O. obscurus ♂ I seen.

175630

(1)

172 ✓

DWC Coll. 129

May 25, 1951

Coll. DWC

N.Y., Tompkins Co., Ithaca, ~~East of~~ Cascadilla Cr.
at pool below dam & bridge near Cornell Univ.
heating plant.

175629

O. p. propinquus 1 ♀ + young.

Had eggs when taken. These hatched May 27.

Many newly hatched young died in dish
with ♀. Living young preserved on various
dates - dates in vials with the young.

Vial of May 30 has both a moult and the molted
animal. Animal killed 5:30 PM. 1st → 2nd stage.

Animal evidently found in process of moulting because
one of the chelae was stuck. I pulled it free and
also pulled last several abdominal segments free.
Was found moulting 10 AM May 29.

(1)

DWC Coll. 130

May 30, 1951

Coll. DWC

N.Y., Tompkins Co., Ithaca. Cayuga Inlet approx.
at S. town line. At end of dirt rd. leading E. from
rt. 13A, 1 mi. S. of Floral Ave.

From lamprey trap set by Roland L. Wigley.

175610

C. robustus - 1 copulating pair, fixed in position
by dropping into boiling water.

175611

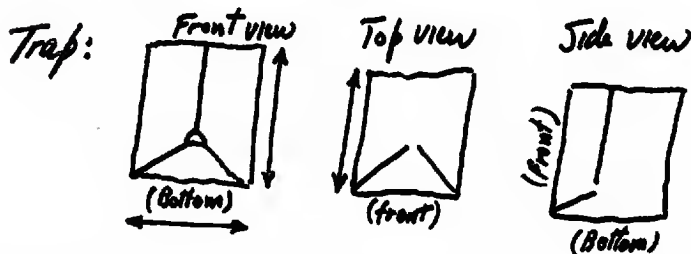
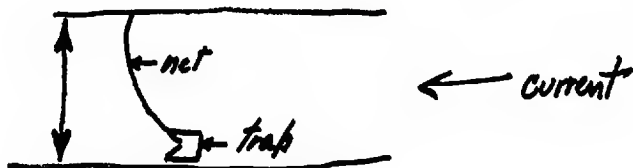
C. b. bartoni 1♀ CTN.L. 36.0 mm.

(3)

DWC Coll. 131
 May 1951
 Coll. R.L. Wigley

N.Y., Tompkins Co., Ithaca, Cayuga Inlet at end of
 dirt rd. leading E. from rt. 13A, 1mi. S. of Floral Ave.

From lamprey trap set across stream by R.L. Wigley



July 4, 1951

C. robustus

26 ♂♂ I (Smallest 34.0 mm.)

55 ♀♀

1 ♂ II (37.6 mm.)

13 ♂ 1 ♂ II 30 ♀
 to British Museum

176227

13
 25
 —
 38

82

DWC Coll. 138
June 1, 1951
Coll. John A. Gustafson and
Earl Deubler Jr.

N.Y., Columbia Co., Kinderhook Cr. at crossing of
rt. 9 between towns of Valatie and Kinderhook.

Width: 125'; Depth: to $3\frac{1}{2}'$, Bottom: rubble
on sand; Current: mod-fast.

July 4, 1951

O. limosus

176331

2 ♂♂-II

1 ♂-II or imm.

1 ♀ imm.

(4)

176

✓

Obtained as gift on May 13, 1951 from bait dealer in Rochester, N.Y. - "The Swap Shop", 666 Clinton Ave. He says they are shipped to a wholesaler from Louisiana, but are called "Texas crabs". Tails used as bait for catfish.

Procambarus sp. 1 ♂

returned by [signature]

DWC Coll. 134
May 3, 1951
Coll. Wm. Rich

N.Y., Tompkins Co., Fall Cr. 1 mi. S.W. of McLean.
Stomach contents of 2 Brown Trout (11" & 11 3/4").
Two crayfish lost in removing from stomachs.

July 5, 1951

O. f. propinquus

175631

whole or { 1 ♂ mm. (14.4 mm., 1 chela)
nearly so { 3 ♀♀ mm. (10.0-1 chela; 18.0-2 chelae; 12.0-2 chelae)

Carapaces:

- 1 - 17.0 mm., no chelae
- 1 - 12.5 mm., no chelae
- 1 - 14.0 mm., 1 chela
- 1 - 18.0 mm., no chelae
- 1 - 14.0 mm., 1 chela
- 1 - 15.0 mm., no chelae
- 1 - 15.0 mm., 2 chelae

Unidentified as to sp.:

- 3 abdomens (sex not indicated)
- 6 chelae
- misc. legs & other fragments

Insects:

- 2 Plecoptera
- 1 Coleoptera
- 1 unident. (head, thorax & wings in good cond.)
- 1 ant

(4)

37

✓

DWC Coll. 135
May 20, 1951
E.C. Ramey (#1971)

N.Y., Cayuga Co., Red House Cr., just S. of Westburg.
(see also coll. 31 from this same locality)

July 5, 1951

C. robustus

176195

- 1 ♂ I
- 2 ♂♂ II (larger = 51.8 mm.)
- 1 ♂ II or imm.
- 5 ♂♂ imm.
- 3 ♀♀ (1 soft)
- 8 ♀♀ imm. (smallest 2 = 25.0 + 20.4 mm)

(20)

O. p. propinquus

175718

- 18 ♂♂ II
- 4 ♂♂ II or imm.
- 2 ♂♂ imm.
- 3 ♀♀ with eggs (smallest = 19.1)
- 8 ♂♂ ♀♀ (imm.?)
- 7 ♀♀ imm.
- 5 ♀♀

(47)

(61)

DWC Coll. 136

May 20, 1951

E.C. Raney (# 1970)

N.Y., Cayuga Co., S. shore Duck L. near town of
Spring Lake.

(see also Coll. 30 from this same locality)

July 5, 1951

O. i. immunis 1♂ I

175832

①
177

DWC Coll. 137
May 20, 1951
E.G. Radley (#1972)

N.Y., Cayuga Co., L. Ontario at Fair Haven
State Park.

July 5, 1951

175632

O.p. probinquus 1♂ I

(1)

140 ✓

DWC Coll. 138
May 20, 1951
E.C. Ramey (#1969)

N.Y., Cayuga Co., Buck Lake outlet at town of
Spring Lake.

(see also DWK Colls. 1 and 29 from this same locality)

July 5, 1951

O. L. IMMUNUS

175937

1 ♂ I

2 ♂♂ II

3 ♂♂ II or imm. (1 soft)

4 ♀♀ (2 soft)

{ 3 ♀♀ (imm.?) (2 soft)

{ 1 ♂ imm. (soft)

14
✓

DWC Coll. 139
May 25, 1951
E.C. Rancy (#1973)

N.Y., Tioga Co., Catatunk Cr. at Candor.
(see also coll. 16 from this same locality)

July 5, 1951

175938 C. b. bartoni 1♂ I (22.2 mm.) 5
3♀♀ (1 soft)
1♀ 1mm.

175939 ~~O. limosus~~ 1♂ I 1

175940 ~~O. p. propinquus~~ 2♂ I 2

~~O. limosus x O. p. propinquus~~ 3♂ I

July 7, 1951 On looking over these Oreonastes, they
all show a mixture of characters to some
degree of O. p. propinquus v O. limosus

DWC Coll. 140
June 15, 1951
Coll. John G. New

N.Y., Chautauque Co., W. Branch French Creek, 1 mi. N.
of town of Firdky Lake.

July 5, 1951

O. obscurus

175612

13 ♂♂ II

5 ♂♂ II or imm.

2 ♂♂ imm.

8 ♀♀ (2 dirty)

2 ♀♀ (imm.?)

1 ♀ imm.

175613

C. robustus

1 ♂ imm. (27.5 mm.)

DWC Coll. 141

June 15, 1951

Coll. John G. New

N.Y., Chautauque Co., French Creek just outside of town of French Creek.

July 5, 1951

C. robustus

175719

1 ♂ II (47.3 mm.)

1 ♂ imm.

1 ♀ imm. (soft)

(3)

O. obscurus

175720

11 ♂♂ II (2 soft)

2 ♂♂ II or imm.

11 ♀♀

3 ♀♀ (imm.?)

4 ♀♀ imm.

31

One O. obscurus ♂ II or imm. has its left stylet on the form of a second pleopod. Its right stylet and both second pleopods are normal. Animal is tagged.

(34)

1442

MWC Coll. 142
June 20, 1951
Coll. Warner

N.Y., Herkimer Co., outlet of Little Moose Lake (goes
into S. branch of Moose R.), 2.5 mi. SE of Old Forge.
Taken from fish trap.

July 6, 1951

175614

C. robustus

1 ♂ II or imm.

3 ♂♂ imm. (smallest = 26.4 mm.)

2 (3 ♀♀) imm. (smallest = 25.1 mm.)

1 ♀

175615

C. b. bartoni

1 ♂ II

1 ♀ (soft)

19

143

✓

BWC Coll. 143
June 22-27, 1951
Coll. Warner

N.Y., Herkimer Co., outlet of Little Moose Lake (goes into
S. branch of Moose R.), 2.5 mi. SE of Old Forge.
Taken from fish trap.

July 6, 1951 C. robustus

8♂♂ I (43.4, 41.0, 42.0, 36.6, 31.7, 34.4, 34.4, 32.4 mm.)

1♂ II (32.7 mm.)

6♂♂ imm.

3♀♀

5♀♀ (imm.?)

4♀♀ imm.

176219

(27)

195



DWC Coll. 144

June 27, 1951

Coll. Ball, Roecker, King

N.Y., Livingston Co., upper end of trib. II (Gulf Brook
or Pokamoonshine Gulf) - Springwater Cr. - Hemlock L.

Bottom - gravel, rubble, silt; Elev. 1480'; Depth: to 2';

Current: mod.; shore: wooded; temp. A 76, W 53.

July 6, 1951

175633

C. robustus

2♂♂ 1mm. (smallest 19.7mm.)

3♀♀ 1mm.

175634

C. b. bartoni

2♂♂ II

(7)

175634

✓

DWC Coll. 145

June 28, 1951

Coll. Paull, Roecker, King

N.Y., Livingston Co., tribs 10A+B and main stream of Springwater Cr. All in vicinity of junction of creek with rt. 15. (10A+B are not indicated on map 3 of Genesee survey, but t10 is just downstream from a rd. crossing. Comparison with rd. map indicates this crossing is rt. 15) Springwater Cr. enters S. end Hemlock L.

Bottom: gravel, sand; Temp: W63, A77;

Depth: to 3'; Veg.: none; Elev. 1100'; Current: mod.

July 6, 1951

C. robustus

175923

2 ♂♂ II

3 ♂♂ 1mm. (1 soft)

2 ♀♀ 1mm.

C. b. bartoni

175922

2 ♀♀

1 ♂ II

1 ♂ II or 1mm.

1 ♂ 1mm (19.7 mm.)

12

148

✓

DWC Coll. 146
June 20, 1951
Coll. Bentley, King, Ball

N.Y., Wyoming Co., Oatka Cr. near Park Glen, 5 mi. S.
of Warsaw.

July 6, 1951

C. robustus

200
#

1 ♀ imm.

175617

O. p. propinquus

8 ♂♂ II

8 ♀♀

4 ♀♀ (imm.?)

1 ♂ II or imm.

175616

(24)

10 9
✓

DWC Coll. 147
June 25, 1951

Coll. Ball, Roecker, King, Stone

N.Y., Steuben Co., Wayland Rod + Gun Club Pond,
south of Wayland.

July 6, 1951

O. i. immunis

175635

2 ♀♀

~~2~~ ♀♀ 1mm. (1 - 10mm.)

1 ♂ 1mm. (10mm.)

(5)

170

DWC Coll. 148

June 21, 1951

Coll. Roecker, King, Ball

N.Y., Ontario Co., Oswego R. dr., t 45 (Fish Cr.) -

t 23 (Gamargua Cr.) - Clyde R. - Seneca R.

at first highway bridge above trib 6. Map. 4A

Bottom: mud, some rubble; Current: sluggish;

Temp. A 74, W 64; Depth: to 3 1/2'; Shore: open pasture.

July 6, 1951

175636

175637

O. i. immunis

1♂ I (soft)

O. propinquus

1♀

(2)

51

DWC Coll. 149

July 4, 1951

V.L. King and George E. Ball

N.Y., Allegany Co., Genesee dr., Black Cr. near Belfast.

Bottom: gravel & rubble ; Water: turbid; Temp Water 69.

July 16, 1951

O. obscurus

4 ♂♂ I (1 soft)

9 ♂♂ II

3 ♂♂ II or imm.

2 ♂♂ imm.

11 ♀♀

4 ♀♀ (imm.?)

175721

33

152

✓

DWC Coll. 150

July 2, 1951

Ball & King

N.Y., Allegany Co., Rush Cr. above Rushford Lake.
(Lake has been made since 1926 - does not show
on Genesee Survey map.)

Bottom: rubble; Shore: wooded; Water temp. 62, air 80.

July 16, 1951

O. obscurus

2 ♀♀

175722

2 ♀♀ 1mm.

4

C. b. bartoni

1 ♂ I

1 ♂ II

175723

7 ♂♂ 1mm.

14

5 ♀♀ 1mm. (2 are 10 + 21 mm.)

(18)

153

DWC Coll. 151

July 16, 1951

Ball & King

N.Y., Chautauqua Co., Outlet of Findley Lake at
crossing of N.Y. Rt. 426.

Bottom: rubble, gravel; Shore: open pasture.

July 16, 1951

C. robustus

175724

1 ♂ imm. (12.6 mm.)

1 ♀ imm.

2

O. obscurus

10 ♂♂ II

5 ♂♂ I or imm.

1 ♂ imm.

3 ♀♀

8 ♀♀ (imm.?)

1 ♀ imm.

20

175725

30

54



DWC Coll. 152

July 2, 1951

Ball + King

N.Y., Allegany Co., Genesee dr., Rushford Lake.

July 16, 1951

O. i. immunis 1 ♀ 1mm. (small) (1)

O. obscurus

1 ♂ II

3 ♂♂ 1mm. (1 = 20.5mm.)

1 ♀

3 ♀♀ 1mm. (1 large) (8)

(A)

155

✓

DWC Coll. 153

July 12, 1951

Ball, King, Bentley

N.Y., Chautauque Co., Rensselaer Cr. (on ^{W.} side of
L. Chautauque.

July 16, 1951

O. obscurus 1♂ II

175638

①

156

✓

DWC Coll. 154
July 13, 1951
DWC & Ivan Huber

N.Y., Tompkins Co., Fall Cr. at Red Mills.

All the C. robustus seen were taken in
1 hour of hand collecting. Q. p. propinquus
numerous, 5 copulating pairs.

July 16, 1951 C. robustus 4♂♂
175729 3♂♂
1 ♀ with eggs (35mm.)

(8)

151

✓

DWC Coll. 155
July 13, 1951
DWC & Ivan Huber

N.Y., Tompkins Co., Fall Cr. at crossing of rt. 222.
3 mi. N. of McLean, 4 mi. ~~W.~~^{E.} of Groton, 5 1/2 mi.
W. of Cortland.

Only a few of the O. p. propinquus seen were taken.
All Cambarus were taken. 3/4 hr. coll. with
10' seine.

Bottom: rubble & gravel; width: 12-15';
depth: to 2'; Shore: open pasture.

July 16, 1951 O. p. propinquus 2 ♂♂ I
175730 1 ♀
1 ♀ 1mm.

C. b. bartoni 2 ♂♂ I (26.5 + 28.6 mm.)
175731 2 ♀♀ (1 crushed, shows well devel. eggs)
1 ♀ (1mm.?, 22 mm.)
1 ♂ II

C. robustus 2 ♂♂ I
175732 5 ♂♂ II
1 ♂ II or 1mm.
1 ♀ (1mm.?)
1 ♀ 1mm.

(4)

(6)

(10)

(20)

DWC Coll. 156
July 22, 1951
Coll. Al Eipper

N.Y., Tompkins Co., Fall Cr. at McLean.
Collected by use of shocker.

July 22, 1951

C. b. bartoni

1 ♂ II

175733

34 ♂♂ mm. (13, ~~13.5~~, 14.0, 14.5
+ 11.5 mm.)

1 ♀

1 ♀ mm. (13.4 mm.)

(6)

C. robustus

84 ♂♂ mm. (15 mm. or under)

175734

2 { 1 ♀
1 ♀ mm. (large)

6 { 1 ♀ mm. (soft, 16 mm.)

4 ♀♀ mm. (15 mm. or under)

(16)

O. p. propinquus

14 ♂♂ I (Smallest 21.4 mm., 1 soft,
1 with low tubercle + minute
spine on V. carp. of chela.)

3 ♂♂ II

6 ♂♂ mm. (Small)

37 ♀♀ (1 soft; 1 with spines on U. of
carp. of both chelae + 19. spines
on merop.; 1 with minute
spine on low tub. on carp. of chela,
1 with genital sp. on 5th legs)

1 ♀ (imm.?)

15 ♀♀ mm. (small)

175735

(66)

(88)

DWC Coll. 157
May 5, 1951
Coll. W.C. Dilger

W. Va., Randolph Co., Gaudineer Knob;
Small, cold, fast-running stream, under
stone. Gyrinophilus habitat.

Bright blue color. Kept alive until
July 28, 1951. Many of the smaller
crayfish were of this color. The larger
ones were dark olive.

C. bartonii 1 ♀
176273

DWC Coll. 158

July 23, 1951

Coll. Henry Lower

N.Y., Tompkins Co., Fall Cr. 1 mi. N.W. of Varma
at part of stream known as Monkey Run.

C. robustus 1 ♀ with eggs. (July 24, 1951)

175639

(9/14/96)

(1)

DNC Coll. 159
Nov. 10, 1942
Col. J. Frank Case

Va., Nottoway Co., Camp Pickett (near town of
Blackstone).

176225 *C. acuminatus* 1♀

(1)
167

DWC Coll. 160
May 4, 1943
Coll. R. Gossmington

Va., Nottoway Co., Camp Pickett (near town of
Blackstone).

175640 c. diogenes 194

①

163

DWC Coll. 161

July 30, 1951

Coll. C.R. Robins #427

N.Y., Chemung Co., Susq. dr., Cayuta Cr. at trib. 23.

April 1953:

Oreanectes p. propinquus

175736

388I

288II

(5)

164

D.W.C. Coll. 162
Aug. 20, 1951
Coll. C.R. Robins #452

N.Y., Oneida Co., Oswego cr., Furnace Cr. 1/2 mi.
above trib. 6. [= trib. 2 of E. Branch of Fish Creek].

Note on back of Robins' orig. label says: Map 2
sent.

I forgot some info on CRR 452; it was
23 August 1951.

Dick.

Also, a separate orig. label has "CRR 452" on
one side + "CRR 465" on the other.

April 1953:

Cambarus robustus

175737

488I

1 ♂ (II?)

2 ♂♂ imm.

499

1 ♀ (imm.?)

(18)

145

DWC Coll. 163

Aug. 21, 1951

Coll. C.R. Robins #448

N.Y., Oneida Co., Oswego dr., Barge canal
feeder stream at New London.

April 1953: Oreonectes i. immutis

175738 2♂♂ I
1♂ II
1♀

(4)

Oreonectes f. propinquus

175739 5♂♂ I
1♂ II j
~~2 ♀♀~~
1 j ♀

(9)

(13)

165

DWC Coll. 164

Aug. 21, 1951

Coll. C.R. Robins # 449

N.Y., Oneida Co., Oswego dr., Wood Cr.

4 mi. NE. of New London.

April 1953: Oreonectes i. immunis

175833

1 ♂ I

Oreonectes p. propinquus

175834

1 ♂ I

2 ♀♀

Cambarus robustus

175835

1 ♀

(5)

117

DWC Coll. 165

Aug. 22, 1951

Coll. C.R. Robins #450

N.Y., Oneida Co., Oswego dr., Mud Cr.

2 mi. NNE of Verona on N.Y. rt. 365. ^{Map 3B}
_{Trib. 13 of}
_{Wood Cr.}

April 1953:

Oreometes obscurus

175618

7 ♂♂ I

2 ♂♂ imm.

10 ♀♀

1 ♀ imm.

(20)

167

DWC Coll. 166

Coll. CR Robins #453

N.Y., Oneida Co., Oswego dr., Furnace Cr.

2 mm. above trib #6.

April 1953:

Cambarus robustus

175659

2 ♂♂ imm.

(2)

14⁹

DWC Coll. 167
Aug. 27-30, 1951
Coll. C.R. Robins #454

N.Y., Cortland Co., Susquehanna dr., Factory
Cr., at one and at three miles W. of Homer.

April 1953: Cambarus b. bartoni

175619

1 ♂ II

2 ♂♂ imm.

1 ♀

1 ♀ imm.

(5)

170

DWC Coll. 168

Sept. 30, 1951

Coll. C.R. Robins # 464

N.Y., Cortland Co., Susquehanna dr., branch
of Tioughnioga R. 4.3 mi. N[W?] of Homer.

April 1953: Orconectes limosus

175660

488I

1♀

(5)

171

DWC Coll. 169

Sept. 30, 1951

Coll. CR Robins #465

N.Y., Cortland Co., Susquehanna dr., Factory
Cr. at Homer (near mouth).

April 1953: Cambarus b. bartoni

175620

1♀

(1)

172

DWC 170
(Same coll. as NYSM 6978)

Aug. 19, 1952

Coll. DW Crocker

N.Y., Saratoga Co., Hudson dr., stream (probably
Kayaderosseras Creek) at bridge on U.S. rt. 9,
2.3 mi. S. of city limits of Saratoga Springs.

April 1953: Orconectes virilis

1 ♂ I

175836 1 ♂ II

1 ♂ imm.

1 ♀

1 ♀ imm.

(5)

173