

1882 C.S.
2nd Report on the
Marine Invertebrata
of Mount Desert Isle., ME.
Charles W. Townsend

Contributed to Maine Memory Network by Mount Desert Island Historical Society

MMN # 102777

Date: 1882

Description: Champlain Society Second Report on the Marine Invertebrata of Mount Desert

C.S. 2^d Report on the Marine Invertebrata
of Mount Desert Island, Maine.
Observations during July & August 1882.
Apr 14 1883. Charles W. Townsend.
In this report I have given a
classified list of the Marine invertebrates with
brief notices of their abundance or rarity,
& their habitat. The number of species
observed was 93 besides a good many species
which still remain unidentified. In my
former report the number of species given
was only 38. The increase in the
number of species took place chiefly in the
group of Mollusca which now number 53 species,
or more than half of the identified species.

C.S. 2d Report on the Marine Invertebrata
of Mount Desert Island, Maine.

Observations during July + August 1882.

Apr 14 1883.

Charles W. Townsend

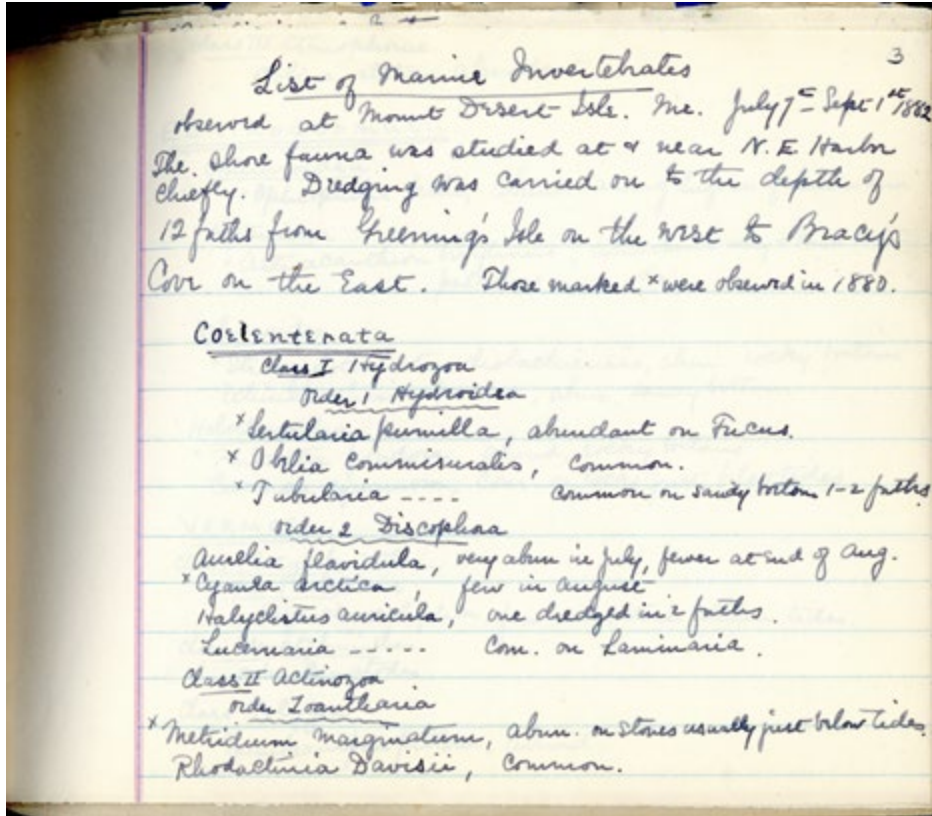
In this report I have given a
classified list of the Marine invertebrates with
a-brief notices of their abundance or rarity,
+ their habitat. The number of species
observed was 92 besides a good many species
which still remain unidentified. In my
former report the number of species given
was only 38. The increase in the
number of species took place chiefly in the
group of Mollusca which now number 53 species,
or more than half of the identified species.

The unidentified species are chiefly among ² the worms + crustacea. Of these I have the preserved specimens besides notes + drawings.

* One found was studied at + near 12. The depth was carried on to the depth of 2 feet from bottom. It is the same to the depth of 100 to the net. This net was used to collect the specimens.

Contents of
- about 100 worms
- 100 crustacea
- 100 mollusks
- 100 insects
- 100 other animals
- 100 plants
- 100 other specimens

The unidentified species are chiefly among the worms + crustacea. Of these I have the preserved specimens besides notes + drawings.



3

List of Marine Invertebrates

Observed at Mount Desert Isle. Me. July 7 – Sept 1 1882
 The shore fauna was studied at + near N.E. Harbor chiefly. Dredging was carried on to the depth of 12 faths from Greening's Isle on the west to Bracy's Cove on the East. Those marked x were observed in 1880.

Coelenterata

Class I Hydrozoa

Order 1 Hydroidea

- x Sertularia purnilla, abundant on Fucus.
- x Obelia commisuralis, common.
- x Tubularia.....common on sandy bottom 1-2 faths.

Order 2 Discoplia

- Aurelia flavidula, very abun in July, fewer at end of Aug.
- x Cyanea arctica, few in August
- Halycictus auricula, one dredged in 2 faths.
- Lucernaria.....com. on Laminaria

Class II Actinozoa

Order Loantharia

- x Metridium marginatum, abun. On stones usually just below tides.
- Rhodactinia Davisii, common.

class III Ctenophorae.
 Bolina alata, abundant. 4

Echinodermata.
Ophiuroidea.
 * Ophiophilis bellis, abund. among rhizoids of Laminaria.

Asteroidea
 * Asteracanthion berylinus, abundant rocky + sand bottoms
 * A. pallidus, do

Echinoidea
 * Strongylocentrotus diobachiensis, abund. rocky bottoms
 Echinarachnius parma, abund, sandy bottoms

Holothuroidea.
 * Pentacta frondosa, abund, rocky bottoms
 Cuvusica squamosa, com. on rocks just below tides.

VERMES
 class, Platyhelminthes.
 order Turbellaria
 Stylochuselliphica, few under stones between tides.

class Nematelminthes
 order Nematodes.

class Polyzoa
 Membranipora pillosa, abund.

Class III Ctenophorae.
 Bolina alata, abundant.

4

Echinodermata.

Ophiuroidea.

x Ophiophilis bellis, abund. Among rhizoids of Laminaria

Asteroidea

x Asteracanthion berylinus, abundant rocky + sand bottoms

x A. pallidus, do

Echinoidea

x Strongylocentrotus diobachiensis, abund. rocky bottoms

x Echinarachnius parma, abund, sandy bottoms

Holothuroidea.

x Pentacta frondosa, abund, rocky bottoms

Cuvusica squamosa, com. On rocks just below tides.

Vermes

Class I Platyhelminthes.

Order Turbellaria

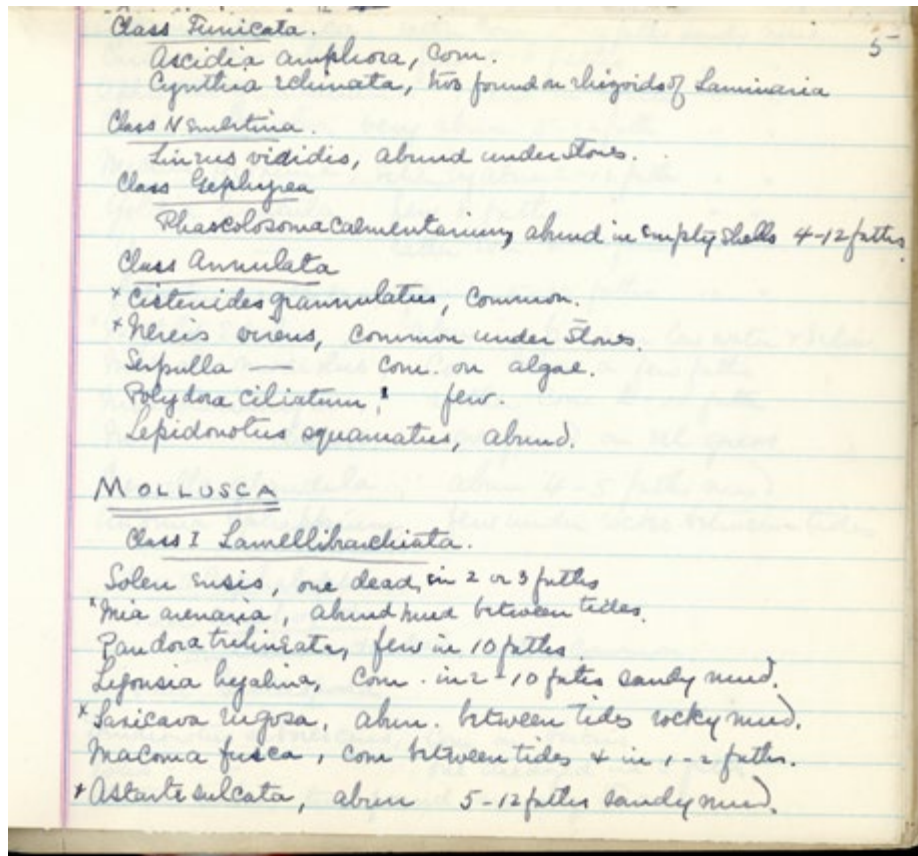
Stylochuselliphica, few under stones between tides.

Class Nematelminthes

Order Nematodes.

Class Polyzoa

Membranipora pillosa, abund.



Class Funicata

Ascidia amphora, com.

Cynthia echinata, two found on rhizoids of Laminaria

Class Nemertina

Lineus vididis, abund under stones.

Class Gephyrea

Phascolosomacalmentarium, abund in empty shells 4-12 faths

Class Annulata

x Cistenides granulatus, common.

x Nereis virens, common under stones.

Serpula _____ com. on algae.

Polydora ciliatum, few.

Lepidonotus squamatus, abund.

MOLLUSCA

Class I Lamellibranchiata.

Solen evis, one dead in 2 or 3 faths

X Mia arenaria, abund mud between tides.

Pandora trilineata, few in 10 faths.

Lyonsia byalina, com, in 2-10 faths sandy mud.

x Sanicava rugosa, abund. Between tides rocky mud.

Macoma fusca, com between tides + in 1-2 faths.

x Astarte sulcata, abund 5-12 faths sandy mud.

Cyprina islandica, rather com. 5-12 faths sandy mud. 6
Cardium pinnulatum, few 5-8 faths " "
Aphrodite gromlandica, 1 dead in 6 faths " "
Cardita borealis, very abun. 5-12 faths " "
Mucula proxima, extremely abun. 2-12 faths " "
Yoldia linatula few 8 faths " "
Y. — rather com. 2-10 faths " "
Leda tenuisulcata, few in 5-10 faths " "
Mytilus edulis, abun in beds near low water + below
Modiola modiolus, com below a few faths.
Modiolacianigra, rather com. 2-10 faths
M. discors, one found on eel grass.
Crenella glandula, abun 4-5 faths mud.
Anomia ephippium, few under rocks between tides.

Class II Cephalophora.
 order Scaphopoda
Dentalium dentale, rather common.
 order Gasteropoda
Dendronotus arborescens, com on Fucus.
Eolis - - - - - one dredged in 5 faths
Chiton ruber, two found among Fucus.

Cyprina islandica, rather com. 5-12 faths sandy mud.
Cardium pinnulatum, few 5-8 fath " "
Aphrodite gromlandica, 1 dead in 6 faths " "
Cardita borealis, very abun 5-12 faths " "
Mucula proxima, extremely abun 2-12 faths " "
Yoldia linatula few 8 faths " "
Y. -- rather com. 2-10 faths " "
Leda tenuisulcata, few in 5-10 faths " "
x Mytilus edulis, abun in beds near low water + below
Modiolo modiolus, com below a few faths.
Modiolacianigra, rather com. 2-10 faths
M. discors, one found on eel grass.
Crenella glandula, abun 4-5 faths mud.
Anomia ephippium, few under rocks between tides.

Class II Cephalophora.

Order Scaphopoda

Dentalium dentale, rather common.

Order Gasteropoda

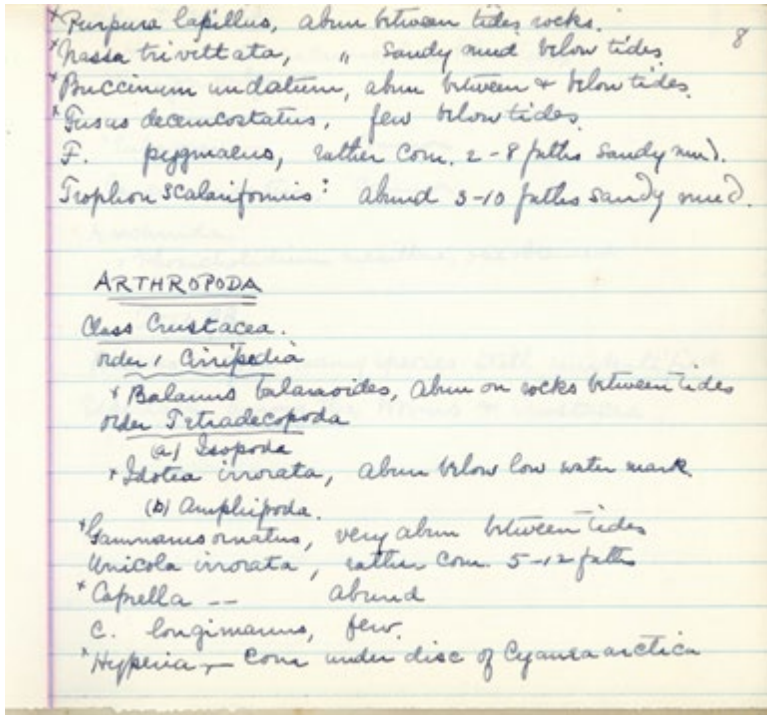
x Dendronotus arborescens, com on focus.

Eolis ----- one dredged in 5 faths

Chiton ruber, two found among Fucus.

Utriculus Gouldii, few in 5-8 faths sandy mud.
Cylichna ---, com in 5-12 faths " "
 x *Tectura testudinalis*, abun on rocks near low tide mark
T. alveus, abun on eel grass
Margarita undulata, two in 2 faths.
M. obscura, few in 5-12 "
M. argentata, one dredged.
Rissoa aculeus, com on rocks between tides.
 + *Lacuna vineta*, abun on eel grass + *Laminaria*
Litorina Eudis, com between tides, rocks
L. palliata, " " " "
L. tenebrosa, " on wharf in N.E. Harbor.
 + *L. litorea*, abun on rocks between tides.
Scalaria groenlandica, one dredged alive in 7 faths.
Aponchis occidentalis, few in 5-6 faths.
Menesetho albula, rather com. 2-10 faths sandy mud.
Velutina zonata, one dredged alive 3 faths.
 + *Lunatia heros*, com.
L. trisuiata, abun in 1-10 faths sandy mud.
L. --?? abun 2-10 " " "
Bela violacea com. 2-10 faths
B. decussata? " " " "

Utriculus Gouldii, few in 5-8 faths sandy mud.
Cylichna ---, com in 5-12 faths " "
 x *Tectura testudinalis*, abun on rocks near low tide mark
T. alveus, abun on eel grass.
Margarita undulata, two in 2 faths.
M. obscura, few in 5-12 faths. "
M. argentata, one dredged.
Rissoa aculeus, com on rocks between tides
 x *Lacuna vineta*, abun on eel grass + *Laminaria*
Litorina Eudis, com between tides, rocks
L. palliata, " " " "
L. tenebrosa, " on wharf in N.E. Harbor.
 x *L. litorea*, abun on rocks between tides.
Scalaria groenlandica, one dredged alive in 7 faths.
Menesetho albula, rather com. 2-10 faths sandy mud.
Velutina zonata, one dredged alive 3 faths.
 x *Lunatia heros*, com.
L. trisuiata, abun in 1-10 faths sandy mud.
L. --?? abun 2-10 " " "
Bela violacea com. 2-10 faths " "
B. decussata? " " " "



- x *Purpura lapillus*, abun between tides rocks.
- x *Nassa trivittata*, " sandy mud below tides.
- x *Buccinum undatum*, abun between + below tides.
- x *Fusus decemcostatus*, few below tides
- F. *pygmaeus*, rather com. 2-8 faths sandy mud.
- Trophon scalariformis* abund 3-10 faths sandy mud.

ARTHROPODA

Class Crustacea.

Order 1 Cirripedia

- x *Balanus balanoides*, abun on rocks between tides

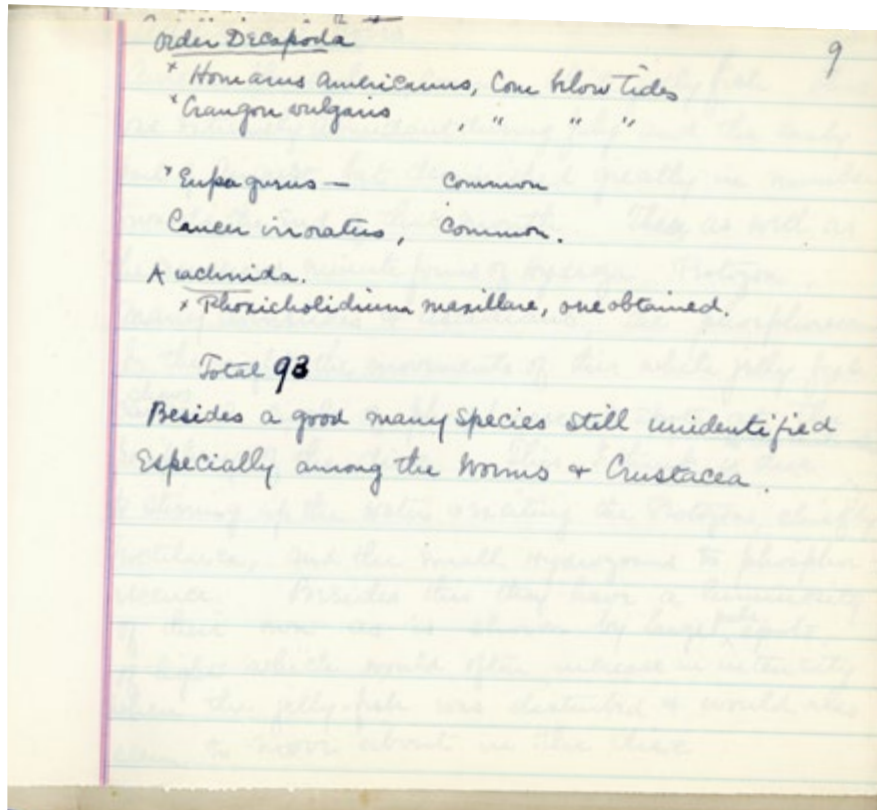
Order Tetradeopoda

(a) Isopoda

- x *Idotea irrorata*, abund below low water mark

(b) Amphipoda.

- x *Gammarus ornatus*, very abun between tides
- Unicola irrorata*, rather com. 5-12 faths
- x *Caprella* --- abund
- C. *longimanus*, few
- x *Hyperia*, ___com under disc of *Cyanea arctica*



Order Decapoda

- x Homarus Americanus, Com below tides
- x Crangon vulgaris " " "

9

- x Eupagurus - common
- Cancer inoratus, common.

Arachnida.

- x Phonicholidium maxillare, one obtained.

Total 93

Besides a good many species still unidentified
especially among the worms + crustacea.

Additional Notes.

10

Aurelia flavidula, common white jelly fish. This was extremely abundant during July and the early part of August but diminished greatly in numbers towards the end of that month. This, as well as the numerous minute forms of Hydrozoa, Protozoa, many annelides & ascidians, are phosphorescent. In the night the movements of this white jelly fish ^{shows} ~~causes~~ a circle of phosphorescent spots at the periphery of the disc. This I think is due ^{to the tentacles} to stirring up the water & exciting the Protozoa, chiefly Noctiluca, and the small Hydrozoans to phosphorescence. Besides this they have a luminosity of their own as is shown by large ^{pale} spots of light which would often increase in intensity when the jelly-fish was disturbed & would also seem to move about in the disc.

Additional Notes.

10

Aurelia flavidula, common white jelly fish. This was extremely abundant during July and the early part of August but diminished greatly in numbers towards the end of that month. This, as well as the numerous minute forms of hydrozoa, Protozoa, many annelides + ascidians, are phosphorescent. In the night the movements of their white jelly fish shows Causes a circle of phosphorescent spots at the periphery of the disc. This I think is due to stirring up the water + exciting the Protozoa, chiefly Noctiluca, and the small Hydrozoans to phosphorescence. Besides this they have a luminosity of their own as is shown by large spots of light which would often increase in intensity when the jell-fish was disturbed + would also seem to move about in the disc.

I must not omit to mention here the curious effect produced by the darting of fish disturbed by the boat in this water filled with phosphorescent animals. It reminded me more of the fire-work serpent than anything else when a fish rushed away into the darkness, making a zig-zag firey trail as he went.

Rhodactinia davisii I found several specimens containing numerous young in different stages of development.

Metridium marginatum. This common brown sea anemone grows to a large size. One I measured was $4\frac{1}{2}$ inches high & $14\frac{1}{2}$ inches in circumference.

I must not omit to mention here the curious effect produced by the darting of fish disturbed by the boat in this water filled with phosphorescent animals. It reminded me more of the fire-work serpent than anything else when a fish rushed away into the darkness, making a zig-zag firey trail as he went.

11

Rhodactinia davisii I found several specimens containing numerous young in different stages of development.

Metridium marginatum. This common brown sea anemone grows to a large size. One I measured was $4\frac{1}{2}$ inches high + $14\frac{1}{2}$ inches in circumference.

Echinarachnius parma. The common sand cake ¹²
was very abundant just below tide mark on
a hard sandy bottom. It is interesting to
note that the very young specimens I found
to be more dome shaped i.e. more embryonic,
more like a sea urchin.

Pentacta frondosa. Although the adult
sea-cucumber is not often found in any numbers
above low water mark, the young ones are
not uncommon in that region, ^{and they} ~~are~~ found
clinging by their suckers to the sea weed.
A piece of Laminaria dredged from cucum-
ber ground usually has several young
cucumbers attached to it.

Crangon vulgaris + Caprella The pro-
tective colorations of these two crustaceans are
very interesting. Among Fucaceae +

Echinarachnius parma. The common sand cake
was very abundant just below tide mark on
a hard sandy bottom. It is interesting to
note that the very young specimens I found
to be more dome shaped i.e. more embryonic,
more like a sea urchin.

Pentacta frondosa. Although the adults
sea-cucumber is not often found in any numbers
above low water mark, the young ones are
not uncommon in that region, in ~~in~~ pools and are found
clinging by their suckers to the sea weed.
A piece of Laminaria dredged from cucum-
ber ground usually has several young
cucumbers attached to it.

Crangon vulgaris + caprella The pro-
tective colorations of these two crustaceans are
very interesting. Among Fucaceae +

Laminariae they are of a brown color. 13
In sandy ~~bottoms~~^{places} the shrimp (Crangon)
takes on a gray color with black specs, which
~~almost~~^{so} exactly resembles the bottom that it is
very difficult to detect him. Among
the red sea-wrads ~~the~~ (Floridiae) they are
both red sometimes bright red, although
brown or gray specimens also occur. It
is obvious that the latter would stand a
poorer chance of escaping, when sought by
enemies.

Laminariae they are of a brown color.
In sandy bottoms-places the shrimp (Crangon)
takes on a gray color with black specs, which
Almost-so exactly resembles the bottom that it is
very difficult to detect him. Among
the red sea-[?] the (Floridiae) they are
both red sometimes bright red, although
brown or gray specimens also occur. It
is obvious that the latter would stand a
poorer chance of escaping, when sought by
enemies.