

## PROVISIONAL KEY TO BRITISH CAPITELLIDS (Adults only)

1. 9 thoracic chaetigers  
more than 9 thoracic chaetigers 2
2. Capillaries restricted to chaetigers 1-3/4; genital hooks present  
  
capillaries extending further back, usually reaching segment 6-7 (varied according to age. These numbers are true for adults. Younger specimens may only have capillaries 1-3; genital hooks present in some individuals.) Captiomastus minimus
3. Genital hooks present only in male worms;  
peristomial ring usually not apparent  
  
Genital hooks present in all adults; peristomial ring may be faintly visible dorsally (variable in preserved material) Capitella capitata  
(=Capitellides giardi)
4. 10 thoracic chaetigers; chaetigers 1-4 with capillaries  
more than 10 thoracic chaetigers, at least 5 with capillaries 5
5. 11 thoracic chaetigers  
13 thoracic chaetigers, all with capillaries Dasybranchus cauducus
6. All thoracic chaetigers with capillaries  
Chaetigers 1-5 with capillaries; 6-11 with hooks Notomastus latericeus  
Heteromastus filiformis

Provisional Key to British Capitellids (Adults Only)

(Lynda Hunter)

1. 9 thoracic chaetigers . . . . .
- more than 9 thoracic chaetigers . . . . .
2. capillaries restricted to chaetigers 1-3/4; genital hooks present (constant in all) . . . . .
- capillaries extending further back, usually reaching segment 6 or 7; genital hooks present in some or all individuals. . . . .
3. genital hooks only in ♂ worms; peristomial ring usually not apparent . . . . .
- genital hooks present in all adults; peristomial ring may be faintly visible ~~dorsally~~ (variable in preserved material) . . . . .
4. 10 thoracic chaetigers; chaetiger 1-4 with capillaries. Mediomastus fragilis
- more than 10 thoracic chaetigers; at least 5 with capillaries . . . . .
5. 11 thoracic chaetigers . . . . .
- 13 thoracic chaetigers, all with capillaries . . . . .
6. all thoracic chaetigers with capillaries . . . . .
- chaetigers 1-5 with capillaries; 6-11 with hooks . . . . .

Double 1 exist  
Capitellum  
minimus ?

mitchell, main stage  
Capitella capitata

Capitella (= Capitellidium)  
giardi

Dasybranchus  
caducus

Notomastus  
latericeus

Heteromastus  
hiliformis

7? J. Hunter come up with Capitellid with crotchetts on 3rd Chaetiger segment  
Cintanum spp.??

## Identification of capitellids - some basic features.

- A difficult group! - interspecific differences small  
- intraspecific differences often large.

### Main features used:-

#### 1. Presence of chaetous 1st segment / peristome etc.

Forget it! Fusion of peristome with prostomium occurs to varying degrees within the Capitella group of species. The micromerism - or otherwise - of this "segment" in thoracic setal counts has led to many errors in numbering. Always go for chaetiger numbers. And always check keys / description / diagrams - they are frequently inconsistent.

#### 2. Number of thoracic chaetigers.

The thorax / abdomen boundary not always clear but this is not too much of a problem with Br. spp.

#### Thoracic setal formula

#### THE DIAGNOSTIC FEATURE

- beware confusion between chaetiger / segment. Always think in chaetigers and adapt texts accordingly - read carefully.
- juvenile capitellids have capillaries restricted to first few chaetigers. With increasing size the capillaries gradually replace hooks back along the thorax. Can lead to great confusion. Means specimens are often indeterminable.
- look for genital hooks first.
- look at rear end of abdomen - I am interested in any oddities here.

#### Body shape - especially anterior end.

See diagrams. The general "gizz" of a worm is often a very good diagnostic character.

Caudal appendage - beware, this may disappear without trace.

Branchiae - beware, one man's branchia is another man's slightly swollen parapodia.

Avoid reliance on nuchal slits, skin texture, hook structure, nephridial pores. Difficult and often wrongly described.

Keep a reference collection - pass on as much material as possible to me or to BM(NH)

### Capitella capitata

peristomium indistinct.

1-6/7C 8-9H with GH in 8-9 notopodia of

immature 1-3C & 4-9H and all variations between.

proboscis seldom exerted

th / add. distinct

few mm - several cms.

organically rich mud  $\rightarrow$  muddy gravel; often associated with rotting vegetation

probably several spp. - don't gather with these yet.



### Capitella giardi

peristomium may be visible - especially in living worms.

1-6C 7H > H 8-9H with GH in 8-9 notopodia of all adults.

GH less in number and more delicate than in C. capitata

th / add. distinct

up to about 1cm.

help holdfast; coralline algae; ? fine muds.

probably more common than records suggest.



### Capitellaster minimus

In some respects v. like Capitella but general body shape more like Hedicomastis

caps restricted to 1-3/4. GLs present in all adults.

needs revision.

peristomium quite distinct although v. small, especially ventrally.

no samples available  $\therefore$  description uncertain - more please!



may ge  
"collar"  
(not  
diagnos)

b. Capitella is an opportunist ie occurs in great numbers wherever there is a favourable - usually transient - habitat. This implies enormous genetic variability and probably accounts for proliferation of species in the literature.

Mediomastus fragilis

istomium distinct or indistinct.

1-4C ; S-10H.

Th (add) may be indistinct.

caudal appendage - may be missing without a trace.

up to 2 cms.

v. common offshore in enriched muds.

cf Heteromastus.

Heteromastus lithurus

v. similar to, but probably distinct from, Mediomastus

1-5C ; 6-11H.

1 cm v. interested in any specimen with 1-4C 5 mixed 6-11 H)

thoracic hooks supposedly long-handled compared with abdomen.

? semi-enriched muds - sp. carbonaria? intertidal.

Notomastus latericus

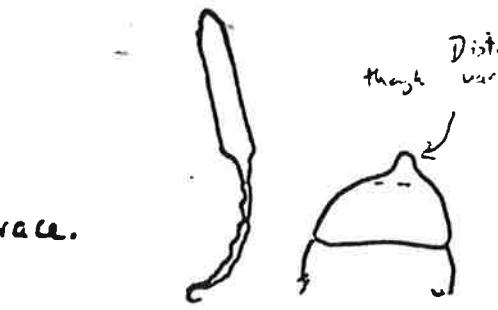
v. red when alive and very active proboscis quite distinct.

proboscis frequently eructed in living worms.

1-11C.

large - up to 10 cm.

inwardal. common in small numbers.



Dist. var.  
thick

Dasybranchus caducus

1-13C.

taught Br. capitellid.

rare. ?

C	Capillary	Chaetae
H	Heckelid	Chaetae