

Owenia collaris vs. Owenia johnsoni

While working on the summer 2006 benthic survey, I examined some *Owenia* specimens that seemed to possess characteristics of both *Owenia collaris* and *Owenia johnsoni*. Most of these specimens were small and had characters that would identify them as *O. johnsoni* for the exception of slight pigmentation dorsally on the peristomium and tentacular crown. Eyespots were present but after looking at some more mature specimens of *O. collaris*, I conceded that they were the beginning of pigmentation and not true eyes. Specimens comparable in size that I felt comfortable were *O. johnsoni* had a truer, more definite eye, which was reddish.

Unfortunately, slight pigmentation was the strongest link to *O. collaris* but I felt it trumped the other characteristics shared with *O. johnsoni* such as a longer tentacular crown and angled peristomial collar, which I rationalized may change with maturation. Listed below are the characteristics I look for and some photos of the animals in question. Have any of you seen intermediate specimens like this and if so what characteristics would you weigh heavier than others to properly identify the animal?

Owenia collaris characters:

1. Pigment present on trunk and tentacular crown
2. Eyes absent
3. Length of tentacular crown short
4. Peristomial collar straight
5. Setiger five always longest
6. Methyl green staining pattern speckled on entire body but especially on thoracic region
7. Dorsal abdominal groove present

Owenia johnsoni characters:

1. Pigment absent on trunk and tentacular crown
2. Reddish, ventrolateral eyes present
3. Length of tentacular crown long
4. Peristomial collar angled
5. Setiger 5 and 6 variable..not always longest
6. Methyl green reveals densely stained peristomial collar, more so than *O. collaris*
7. Dorsal abdominal groove absent





Figure 1. *O. collaris* with variable tentacular crown length.



Figure 2. *O. collaris*? Note pigment, tentacular crown length, and angle of peristomial collar.



Figure 3. *Owenia collaris*? Note pigment.



Figure 4. *Owenia collaris*? (top) with *O. collaris* (bottom).



Figure 5. *Owenia johnsoni* (dorsal view).



Figure 6. *Owenia johnsoni* (lateral view).



Figure 7. *Owenia collaris?* with *Owenia johnsoni*.