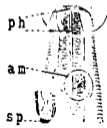


5. *Terschellingia polaris*, n. sp. The cuticle is traversed by about 700 striae, plainly visible near the extremities only. Narrow double wings, having a width about equal to that of two annules of the cuticle, begin near the middle of the neck. The central raised body, or "fleck," of the amphid stains about as strongly as the nuclei elsewhere in the body. Very minute, inconspicuous papillae, probably six in number, occur on the confluent lips. The vestibule is very minutely longitudinally striated. About halfway to the amphids there is a break in the musculature of the oesophagus; the pharynx probably extends to this point. The conoid neck contains a cylindroid oesophagus, which, near the nerve-ring, is one-third as wide as the neck, but ends in a bulb five-sixths as wide as the base of the neck. The lining of the oesophagus is distinct, its most prominent optical expression being a single refractive line. The cardiac valve causes a slight, simple modification in the lining, one-eighth as wide as the bulb. The more or less thick-walled in-

annules of the cuticle, begin near the middle of the neck. The central raised body, or "fleck," of the amphid stains about as strongly as the nuclei elsewhere in the body.



ph	.8	9.9	15.5	44 <sup>33</sup>	84.9	.73mm.
	1.	3.2	3.6	4.	2.5	
am	.8	9.4	15.1	57	84.6	.8mm.
sp	1.	3.1	3.4	3.8	2.9	

where in the body. Very minute, inconspicuous papillae, probably six in number, occur on the confluent lips. The vestibule is very minutely longitudinally striated. About halfway to the amphids there is a break in the musculature of the oesophagus; the pharynx probably extends to this point. The conoid neck contains a cylindroid oesophagus, which, near the nerve-ring, is one-third as wide as the neck, but ends in a bulb five-sixths as wide as the base of the neck. The lining of the oesophagus is distinct, its most prominent optical expression being a single refractive line. The cardiac valve causes a slight, simple modification in the lining, one-eighth as wide as the bulb. The more or less thick-walled in-

testine is separated from the oesophagus by a cardiac collum one-sixth as wide as the neck, and soon becomes two-thirds as wide as the body. The first few cells of the intestine, at the cardiac region, are very small, with relatively large nuclei that stain strongly. The intestine is separated from the rectum by a pyloric collum one-fourth as wide as the corresponding portion of the body. From the anus, whose posterior lip is elevated, the chitinized rectum leads inward and forward a distance equal to the length of the anal body-diameter. The granules of the intestinal cells are small and scarce.

The tail tapers from the anus and ends in a slightly swollen terminus. A few small, stiff, cylindroid, blunt caudal setae are to be seen, mostly about one-fourth as long as the terminus is wide. The broadly saccate caudal glands, arranged in a loose tandem in the anterior fourth of the tail, empty through distinct ducts and elongated, narrow ampullae. What appears to be an irregularly ellipsoidal renette-cell is located at a distance behind the neck equal to the width of the body; it is half as long as the body is wide, and three-fourths as wide as long. The nerve-ring, which surrounds the oesophagus more or less obliquely, is accompanied by distinct nerve-cells definitely grouped, both in front of it and behind, and extending backward to near the cardiac bulb. From the small and inconspicuous, but more or less elevated vulva, the conoid, non-chitinized vagina leads inward at right angles to the ventral surface two-fifths the way across the body. The eggs have a length nearly one and three-fourths times that of the body-diameter, appear about half as wide as long, and have been seen in the uterus one at a time. The medium sized, more or less tapering ovaries contain fifteen to twenty developing ova, for the most part flattened and arranged single file.

The more or less slender, sub-acute, uniform, slightly yellowish spicula have a simple and rather strong framework, and are one and one-fourth times as long as the anal body-diameter. The proximal ends appear to lie opposite the body axis. The triangular, blunt accessory pieces have a simple and rather frail framework; the part applied to the spicula is one-fourth as long as they, while the tapering apophyses lie a little backward and end opposite the body-axis. The ejaculatory duct is one-fourth, and the testis one-half, as wide as the body. The comparatively few (about a dozen) primary spermatocytes occur in the testis in single file, then come three pairs double file—these latter relatively huge. That is to say, the primary spermatocytes increase much in size and then divide transversely into very unequal parts, a small distal part and a large proximal part, and these two unequal parts divide almost simultaneously in the longitudinal direction. Thus there appear four cells arranged in two pairs side by side, a small strongly staining pair with inconspicuous nuclei, and a large pair which do not stain except in their relatively small nuclei which show about seven small more or less globular chromosomes. These two divisions represent the usual reduction divisions, and give rise to spermatozoa of very different size and appearance. The phenomenon is reminiscent of the formation of the polar bodies. In some specimens the smaller cells, those that in their appearance remind one of polar bodies, appear as if divided a second time, but there is uncertainty about this. It is the writer's intention to prepare a separate report on this species and its spermatogenesis.

Habitat; remarks. Cape Royds; Bay, Cape Royds. Numerous specimens, mostly somewhat shrunken.