






Moss Safari: what lives in moss?

Big Five identification sheet

Big Five at low magnification (40×)

<p>Nematodes (known as roundworms)</p> <p>These are smooth worms with pointed ends. They are often observed thrashing or stationary. They are often transparent, but you may observe coloured food in their gut. At higher magnifications, you can see their mouth parts and internal organs, including their digestive system and reproductive system.</p> <p>Length: 200–400 microns</p>	 <p><i>Image: A. Chandler-Grevatt</i></p>
<p>Rotifers (known as wheel animals)</p> <p>There are several kinds, but the basic body plan is a top end with fast-moving cilia that create big currents, a mouth midway, and a kind of foot at the end. However, they can contract into a ball shape. They are transparent, and you will see their digestive systems and sometimes eggs inside them.</p> <p>Length: approx. 350 microns</p>	 <p><i>Image: Damián H. Zanette/Wikipedia</i></p>
<p>Tardigrades (known as water bears or moss piglets)</p> <p>They can be found stationary or moving. They have distinctive movement, as they walk on chubby clawed legs. They have a pointy 'snout' through which they feed. If you look carefully at their heads, you may see two red eyes, each of which consists of a single cell. Sometimes you will see shed skin with eggs inside it.</p> <p>Length: 450 microns</p>	 <p><i>Image: A. Chandler-Grevatt</i></p>
<p>Oribatid mites (known as moss mites)</p> <p>A variety of mites are found in moss. They have a relatively large, dark body and eight legs that move in a similar way to a spider or beetle. Mites are arthropods (spider family) with eight legs. Adjusting the lighting often allows the body to become translucent.</p> <p>Length: 600 microns</p>	 <p><i>Image: A. Chandler-Grevatt</i></p>
<p>Gastrotrichs (known as hairybellies or hairybacks)</p> <p>A flatworm-like organism covered in hairs, cilia, with a forked tail. Using its cilia against a surface, it glides gracefully and quickly.</p> <p>Length: 100–300 microns</p>	 <p><i>Image courtesy of David McCamey</i></p>