

# Great Lakes Worm Watch

## Key to exotic earthworm species common in the Great Lakes region

This dichotomous key will lead you step by step to the identification of your earthworm. Begin at

To identify an earthworm to species you generally need and adult specimen (with a clitellum) and

1	The earthworm is a juvenile (lacks a clitellum) <b>GO TO 2</b>
	The earthworm is an adult (has a clitellum) <b>GO TO 7</b>
2	The earthworm is pigmented <b>GO TO 3</b>
	The earthworm is non-pigmented <b>GO TO 6</b>
3	The earthworm has paired setae <b>GO TO 4</b>
	The earthworm has separate setae <b><i>Dendrobaena octaedra</i></b>
	The earthworms setae are a row of bristles around each <b><i>Amyntus species</i></b>
4	The earthworm has widely paired setae <b><i>Dendrodrilus rubidus</i></b>
	The earthworm has closely paired setae <b>GO TO 5</b>
5	The fresh specimen has distinctive yellow banding in the intersegmental grooves <b><i>Eisenia fetida</i></b>
	There is no yellow coloring in the intersegmental grooves on fresh specimens <b><i>Lumbricus rubellus or Lumbricus terrestris or Eisenia eiseni or Eiseniella tetraedra or Aporectodea longa</i></b> (Note: it is impossible to distinguish these species when they are juveniles. Depending on which of these species you have found as adults, you may be able to make reasonable conclusions about the identity of the juveniles.)
6	The earthworm has closely paired setae <b><i>Aporectodea species or Allolobophora chlorotica</i></b> (Note: if the fresh specimen has a distinctive greenish color, you could conclude that it is <i>Allolobophora chlorotica</i> )
	The earthworm has widely paired setae <b><i>Octolasion tyrtaeum or Octolasion cyaneum</i></b>
	The earthworms setae are a row of bristles around each segment <b><i>Amyntus species</i></b>
7	The earthworm is pigmented <b>GO TO 8</b>
	The earthworm is non-pigmented <b>GO TO 15</b>
8	The earthworm has paired setae <b>GO TO 9</b>
	The earthworm has separate setae <b><i>Dendrobaena octaedra</i></b>
	The earthworms setae are a row of bristles around each segment <b><i>Amyntus species</i></b>
9	The earthworm has widely paired setae <b><i>Dendrodrilus rubidus</i></b>
	The earthworm has closely paired setae <b>GO TO 10</b>

10	The clitellum start before segment 25 <b>GO TO 11</b>
	The clitellum start after segment 25 <b>GO TO 12</b>
11	Male pore is on segment 13 <b>Eiseniella tetraedra</b> (Note: For this species, the clitellum starts on segment 23 (or 22) and extends to segment 26 (or 27). It also has a broad TP)
	Male pore not on segment 13 <b>Eisenia eiseni</b> (Note: For this species, the clitellum starts on segment 24 (or 23) and extends to segment 32. It has no TP)
12	The clitellum starts on segment 32, or definitely after segment 30 <b>Lumbricus terrestris</b>
	The clitellum starts before segment 30 <b>GO TO 13</b>
13	The clitellum starts on segments 26 or 27 and obvious yellow color in the intersegmental grooves is not present. <b>GO TO 14</b>
	The clitellum starts on segments 24, 25 or 26 and obvious yellow color in the intersegmental grooves is present. <b>Eisenia fetida</b>
14	The clitellum is on segments 27 (or 26) through 32 and if GT are present, they are not limited to segments 31,33 and 34. <b>Lumbricus rubellus</b>
	The clitellum is on segments 27 through 34 and if GT are present, they limited to segments 31,33 and 34. Earthworms is lightly-brown pigmented on head, between 15cm in length <b>Aporrectodea longa</b>
15	The earthworm has widely paired setae <b>GO TO 16</b>
	The earthworm has closely paired setae <b>GO TO 17</b>
16	The clitellum is on segments 30-35 (may be orangish in color) with long narrow (linear) TP on segments 31-34 <b>Octolasion tyrtaeum</b>
	The clitellum is on segments 29-34 (usually beige or yellowish in color) with wide TP on segments 30-33 that have a puckered appearance on the ventral (belly) edge <b>Octolasion cyaneum</b>
17	The earthworms setae are a row of bristles around each segment <b>Amyntus species</b>
	The clitellum starts on segments 27 or later <b>GO TO 18</b>
18	The clitellum is on segments 25-32 and maybe noticeable flared. The TP, if present is small and continuous on segments 29-31. Earthworm is <8cm in length <b>Aporrectodea rosea</b> (Note: this species is also referred to as <i>Allolobophora rosea</i> )
	The clitellum is on segments 27-34 <b>GO TO 19</b>
18	The clitellum is on segments 29-37 and the TP are separate and button-like (sometimes sucker-like) on segments 31, 33, 35. Earthworm is <7cm in length <b>Allolobophora chlorotica</b> (Note: Fresh specimens often have a distinctive greenish color)

19	The TP is distinctly notched or, when not fully developed, may appear as two triangles or circular bumps side by side <b>GO TO 20</b> (Note: if identification cannot proceed beyond this step, the earthworm should be identified as <i>Aporrectodea caliginosa</i> complex)
	The TP is linear or oval, but not notched <b>GO TO 21</b>
20	The GT are on alternating segments in clitellum (30,32,34) <b><i>Aporrectodea tuberculata</i></b>
	The GT are on both alternative and consecutive segments in clitellum (27,30,32-34) <b><i>Aporrectodea caliginosa</i></b>
21	The GT are on alternative and consecutive segments (28,30,32-34) and earthworm has no pigmentation <b><i>Aporrectodea trapezoides</i></b>
	The GT are on consecutive on segments (31, 33, 34) and earthworm has light brown pigmentation on the head <b><i>Aporrectodea longa</i></b>