

# Aquatic Macroinvertebrate ID Key

## Invertebrate Size (—)

Average actual size unless stated otherwise.

## Pollution Sensitivity\*:

- NR Not rated
- 10—8 Very sensitive
- 7—6 Sensitive
- 5—4 Tolerant
- 3—1 Very tolerant

## Acknowledgements



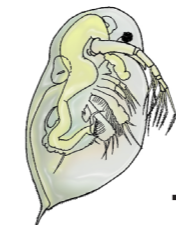
This key was designed by Ron Simms and Amy Blaylock, 2002.

Adapted by Steve Walker, 2011.




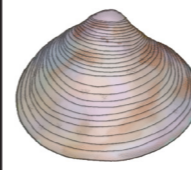
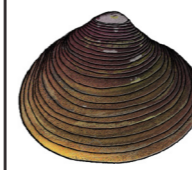
Assistance was kindly provided by the following staff members of the South Australian Museum: Dr. Errol Matthews, Dr. Chris Watts and Mr Robert Hamilton-Bruce.

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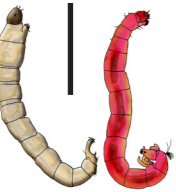
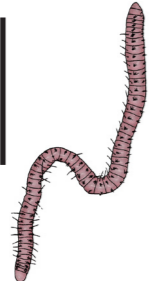

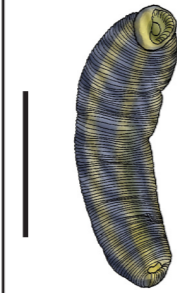

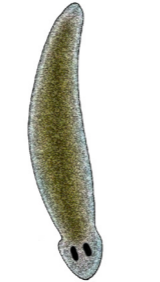
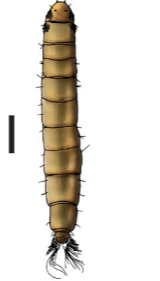
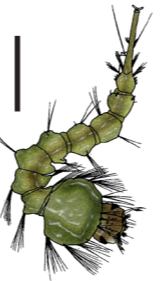



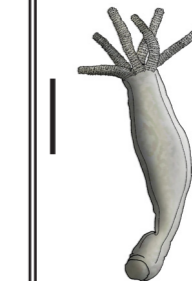
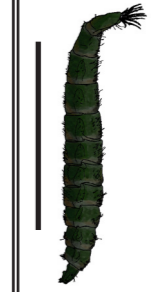

**1** Microscopic  
Bigger than microscopic go to **2**

Green, white or black  Seed Shrimp (NR)	Teardrop shape, jerking movement  Copepod (NR)	Swims with a jerk using antennae  Water Flea (NR)
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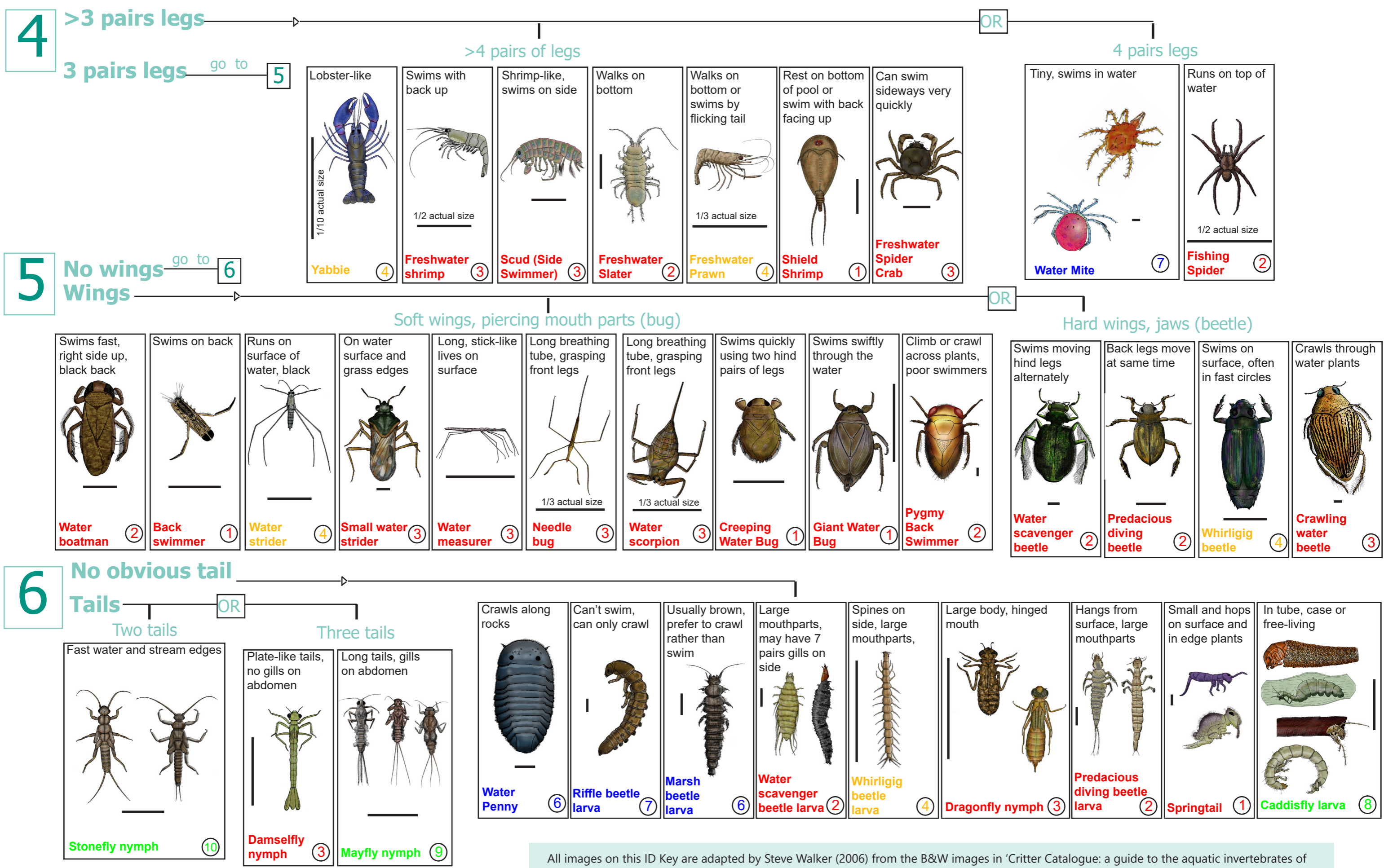
**2** Shell  
No shell go to **3**

Single shell			OR		Double shell	
Flattened shell with small hump  Freshwater limpet (4)	Spiral shell, opening on left  Pouch Snail (1)	Spiral shell, opening on right  Gilled Snail (1)			Small, pale delicate shell  Pea shell (5)	Small, darker shell with ridges  Little basket shell (4)

**3** Legs go to **4** over page  
No legs go to **4**

Worm-like						OR						Tentacles, brushes or tails						OR	Mat-like
Green to red, twisting  Non-biting midge larva (3)	Segmented, no suckers, +/- bristles 1/2 actual size  Segmented worm (2)	Long, very thin, swims in 'S' shape, can't coil  Biting midge larva (4)	Suckers, expands and contracts  Leech (1)	Hair-like, swims in "S" shape  Round worm (3)	Slides along bottom  Flatworm (2)	Six fleshy lobes at end of body  Cranefly larva (5)	Breathing tube at rear  Mosquito larva (1)	Large head, wriggles  Mosquito pupa (1)	Grub-like with no obvious head  March fly larva (3)	Sucker on end of body, waves head  Blackfly larva (5)	Slender, with tentacles, attached to solid surface  Hydra (2)	Hangs from surface by ring of hairs  Soldier fly larva (2)	Simple, multi-cellular colony.  Freshwater Sponges (4) grow to several metres						

\*Sensitivity ratings from SIGNAL2 system in "New sensitivity grades for Australian river macroinvertebrates. Bruce C. Chessman. Marine and Freshwater Research, 2003, 54, 95-103."



All images on this ID Key are adapted by Steve Walker (2006) from the B&W images in 'Critter Catalogue: a guide to the aquatic invertebrates of South Australian inland waters (2004 EPA)' except for the crawling water beetle (Steve Walker 2006).

Landscape Hills and Fleurieu gratefully acknowledges Green Adelaide for allowing this resource to be adapted for the Hills and Fleurieu region