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ACCEPTED MANUSCRIPT

Benthic walking, bounding, and maneuvering in flatfishes (Pleuronectiformes: Pleuronectidae):

New vertebrate gaits

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Keywords: Benthic locomotion, fin rays, kinematics, metachronal wave

Highlights:

- 1. Flatfishes converge dorsal and anal fin rays to form functional "fin-feet."
- 2. Dorsal and anal fin rays move in a metachronal wave to produce a walking gait.
- 3. Flatfish benthic locomotion is structurally and functionally unique in vertebrates.

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