Experimental Biology

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Cover: Animals and objects in water produce electrical fields that are used by numerous vertebrate species for navigation, communication and prey detection. Whether invertebrates gain similar benefit from these fields is debatable. B. W. Patullo and D. L. Macmillan (pp. 651-657) tested the response of two species of Australian crayfish to fields of different amplitude and frequency. The crayfish responded to fields that were sufficiently low to be used in navigation or prey and predator detection but a biological function remains to be discovered. This is the strongest suggestion to date of a widespread response to low-level electrical fields in aquatic invertebrates. Photo D. Paul and B. W. Patullo.

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