

ODOR DETECTION AND FLOW

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HISTORICAL PERSPECTIVE (mostly insects):

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Bossert, W.H., and E.O. Wilson. 1963. The analysis of olfactory communication among animals. *J. Theor. Biol.* 5: 443-469.

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Murlis, J., and C.D. Jones. 1981. Fine-scale structure of odour plumes in relation to insect orientation to distant pheromone and other attractant sources. *Physiol. Entomol.* 6: 71-86.

Ingram, C.L., and R.R. Hessler. 1983. Distributional and behavioral patterns of scavenging amphipods from the central North Pacific. *Deep Sea Res.* 30: 683-706.

Zimmer-Faust, R.K., and J.F. Case. 1983. A proposed dual role of odor in foraging by the California spiny lobster, *Panulirus interruptus* (Randall). *Biol. Bull.* 164: 341-353.

Elkinton, J.S., R.T. Carde, and C.J. Mason. 1984. Evaluation of time-average dispersion models for estimating pheromone concentration in a deciduous forest. *J. Chem. Ecol.* 10: 1081-1108.

Rowe, G.T., M. Sibuet, and A. Vangriesheim. 1986. Domains of occupation of abyssal scavengers inferred from baited cameras and traps on the Demerara abyssal plain. *Deep Sea Res.* 33: 501-522.

REVIEWS:

Nowell, A.R.M., and P.A. Jumars. 1984. Flow environments of aquatic benthos. *Annu. Rev. Ecol. Syst.* 15: 303-328. (This article is still amazingly timely!).

Nowell, A.R.M., and P.A. Jumars. 1987. Flumes: Theoretical and experimental considerations for simulation of benthic environments. *Oceanogr. Mar. Biol. Annu. Rev.* 25: 91-112.

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Westerburg, H. 1991. Properties of aquatic odour plumes, Pp. 45-65. In K. Doving [ed.], *Proceedings of the Tenth International Symposium on Olfaction and taste*. Graphic Communication System, Oslo, Norway.

Pawlik, J.R. 1992. Chemical ecology of the settlement of benthic marine invertebrates. *Oceanogr. Mar. Biol. Annu. Rev.* 30: 273-335.

Murlis, J., J.S. Elkinton, and R.T. Carde. 1992. Odor plumes and how insects use them. *Annu. Rev. Entomol.* 37: 505-532.

RECENT (AND/OR RELEVANT) ARTICLES:

Jackson, G.A. 1987. Simulating chemosensory responses of marine microorganisms. *Limnol. Oceanogr.* 32: 1253-1266.

Sainte-Marie, B., and B.T. Hargrave. 1987. Estimation of scavenger abundance and distance of attraction to bait. *Mar. Biol.* 94: 431-443.

Himmelman, J.H. 1988. Movement of whelks (*Buccinum undatum*) towards a baited trap. *Mar. Biol.* 97: 521-531.

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odor trails. *Limnol. Oceanogr.* 33: 1586-1595.

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Pawlik, J.R., C.A. Butman, and V.R. Starczak. 1991. Hydrodynamic facilitation of gregarious settlement of a reef-building tube worm. *Science* 251: 421-424.

Lapointe, V., and B. Sainte-Marie. 1992. Currents, predators, and the aggregation of the gastropod *Buccinum undatum* around bait. *Mar. Ecol. Prog. Ser.* 85: 245-257.

Gross, T.F., F.E. Werner, and J.E. Eckman. 1992. Numerical modeling of larval settlement in turbulent bottom boundary layers. *J. Mar. Res.* 50: 611-642.

Butman, C.A., and J.P. Grassle. 1992. Active habitat selection by *Capitella* sp. larvae: I. Two-choice experiments in still water and flume flow. *J. Mar. Res.* 50: 669-715.

Grassle, J.P., C.A. Butman, and S.W. Mills. 1992. Active habitat selection by *Capitella* sp. I larvae: II. Multiple choice experiments in still water and flume flows. *J. Mar. Res.* 50: 717-743.

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Turner, E.J., R.K. Zimmer-Faust, M.A. Palmer, M. Luckenbach, and N.D. Pentcheff. 1994. Settlement of oyster (*Crassostrea virginica*) larvae: Effects of water flow and a water soluble chemical cue. *Limnol. Oceanogr.* 39: 1579-1593

Eckman, J.E., F.E. Werner, and T.F. Gross. 1994. Modeling some effects of behavior on larval settlement in a turbulent boundary layer. *Deep Sea Res.* 41: 185-208.

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Weissburg, M.J., and R.K. Zimmer-Faust. 1994. Odor plumes and how blue crabs use them in finding prey. *J. Exp. Biol.* 197: 349-375.

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Dusenbury, D.B., and T.W. Snell. 1995. A critical body size for use of pheromones in mate location. *J. Chem. Ecol.* 21: 427-438.

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