

Natural drinking strategies

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We examine the fluid mechanics of drinking in nature. We classify the drinking strategies of a broad range of creatures according to the principal forces involved, and present physical pictures for each style. Simple scaling arguments are developed and tested against existing data. While suction is the most common drinking strategy, various alternative styles have evolved among creatures whose morphological, physiological, and environmental constraints preclude it. Particular attention is given to creatures small relative to the capillary length, whose drinking styles rely on relatively subtle interfacial effects.