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Title of abstract: **Trade-offs in zooplankton feeding behaviour**

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Zooplankton has developed three different ways of collecting food: they can be ambush feeders that wait for prey to pass within their dining sphere; they can generate a feeding current and harvest prey that are entrained in the feeding current; or they are cruise feeders that capture prey that they encounter as they cruise through the water. We experimentally quantify the costs and benefits, “tradeoffs”, in terms of feeding efficiency, predation mortality, and metabolic expenses, associated with these three main feeding behaviors in zooplankton. The copepods *Temora longicornis* (feeding-current feeder), *Oithona nana* (ambush feeder) and *Centropages hamutus* (cruising feeder) were used as model organisms. We will present our experimental results about how these trade-offs are interrelated and vary among feeding behaviours and optimal feeding strategies in zooplankton will be discussed.