

1 Supporting Information

2 **Table S1:** Water quality variables in zoo hippopotamus pool measured before and after ~24 hours of use
 3 by three adult hippopotami. Results given as means and standard deviations in parentheses.

	Temperature	Spec. Cond.	DO	DO
	(°C)	($\mu\text{S cm}^{-1}$)	(% sat)	(mg L^{-1})
Before Use	14.1	236.5	103.5	10.6
	(1.5)	(10.6)	(1.6)	(0.5)
After Use	20.5	332.7	95.7	8.6
	(2.7)	(18.5)	(1.4)	(0.6)

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6 **Table S2:** Hippopotamus food characteristics at the Milwaukee County Zoo over the 6-day study period.

Day	Food Dry Mass	C	N	P
	(kg)	(g)	(g)	(g)
1	58.8	26,166.2	1,605.8	237.4
2	60.3	26,843.9	1,648.5	241.5
3	56.2	25,002.0	1,535.5	226.4
4	69.1	30,463.4	2,109.0	281.3
5	66.2	29,832.2	1,596.5	240.2
6	70.5	31,352.3	1,932.4	287.5
Day 1-3 Avg.	58.4 (2.1)	26,004.0 (931.6)	1,596.6 (57.1)	235.1 (7.8)
Day 1-6 Avg.	63.0 (5.9)	28,072.0 (2,603.5)	1,725.2 (228.9)	250.8 (25.4)

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9 **Table S3:** Percent by weight of C, N and P in food and fecal samples collected from both the Milwaukee
10 County Zoo and the Mara River, Kenya. Results given as means and standard deviations in parentheses.

Sample	C (% wt.)	N (% wt.)	P (% wt.)
Zoo Food	44.5 (0.0)	2.7 (0.0)	0.4 (0.0)
Zoo Feces	45.4 (0.1)	1.6 (0.1)	0.5 (0.1)
Field Food	41.2 (1.5)	2.8 (0.8)	0.3 (0.1)
Field Feces	34.9 (1.3)	1.0 (0.1)	0.2 (0.0)

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