Limited impact of big fish mothers for population replenishment

A recent meta-analysis by Barneche et al. (Science 360(6389): 642) show that fish reproductive output scales hypergeometrically with female weight. This result challenges the common assumption that reproductive output is proportional to weight. The implication made is that current theory and practice severely underestimates the importance of larger females for population replenishment. Their example for cod shows that current practice makes an error of 149%. By properly accounting for fish demography we show that the error is maximally on the order of 10%, and in most other fish stocks likely much less.

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