# Corrigenda

# **Corrections to**

Beyan, C., Boom, B. J., Liefhebber, J. M. P., Shao, K-T., and Fisher, R. B. Natural swimming speed of Dascyllus reticulatus increases with water temperature. ICES Journal of Marine Science, doi: 10.1093/icesjms/fsv104.

The authors wish to modify several incorrect statements made in the article. These modifications correct the context in which the results are presented and interpreted.

## The first sentence of the Abstract that reads:

Recent research on the relationship between coral reef water temperature and fish swimming activity has stated that swimming speed is inversely correlated with temperature (Johansen, J. L., and Jones, G. P. 2011. Increasing ocean temperature reduces the metabolic performance and swimming ability of coral reef damselfishes. Global Change Biology, 17: 2971–2979; Johansen, J. L., Messmer, V., Coker, D. J., Hoey, A. S., and Pratchett, M. S. 2014. Increasing ocean temperatures reduce activity patterns of a large commercially important coral reef fish. Global Change Biology, 20: 1067–1074).

## should read:

Recent research on the relationship between coral reef water temperature and fish swimming activity has stated that swimming speed is inversely correlated with temperature above a species' optimum temperature (Johansen, J. L., and Jones, G. P. 2011. Increasing ocean temperature reduces the metabolic performance and swimming ability of coral reef damselfishes. Global Change Biology, 17: 2971–2979; Johansen, J. L., Messmer, V., Coker, D. J., Hoey, A. S., and Pratchett, M. S. 2014. Increasing ocean temperatures reduce activity patterns of a large commercially important coral reef fish. Global Change Biology, 20: 1067–1074).

## The second to last sentence of the Abstract that reads:

Therefore, our results contradict previous studies (Johansen and Jones, 2011), which also consider *D. reticulatus* and which have reported that fish speed decreases as water temperature increases (Myrick, C. A. and Cech, J. J. 2000. Swimming performance of four California stream fishes: temperature effects. Environmental Biology of Fishes, 58: 289–295; Ojanguren, A. F. and Brana, F. 2000. Thermal dependence of swimming endurance in juvenile brown trout. Journal of Fish Biology, 56: 1342–1347; Lough 2007; Johansen et al., 2014).

## should read:

Our results complement previous studies that investigated the effect of temperature on the swimming performance of different fish species in the laboratory (Johansen and Jones, 2011; Myrick, C. A. and Cech, J. J. 2000. Swimming performance of four California stream fishes: temperature effects. Environmental Biology of Fishes, 58: 289–295; Ojanguren, A. F. and Brana, F. 2000. Thermal dependence of swimming endurance in juvenile brown trout. Journal of Fish Biology, 56: 1342–1347; Lough 2007; Johansen et al., 2014).

## The second sentence of the Introduction that reads:

More recent studies have shown that increasing the water temperature decreases the swimming capacity of fish (Johansen and Jones, 2011; Johansen et al., 2014).

#### should read:

More recent studies have shown that increasing the water temperature above a species' optimum decreases the swimming capacity of fish (Johansen and Jones, 2011; Johansen et al., 2014).

## The fourth sentence of the Introduction that reads:

As the water temperature of the tank was increased to  $3^{\circ}$ C above the control temperature (29°C), a significant decrease in swimming performance was observed even at  $30^{\circ}$ C for five species including *D. reticulatus* (Johansen and Jones, 2011).

#### should read:

As the water temperature of the tank was increased to 3°C above the control temperature (29°C), a significant decrease in swimming performance was observed for five species, including *D. reticulatus* (Johansen and Jones, 2011).

## The second to last sentence of the Introduction that reads:

We have utilized almost a year's worth of data, which include natural temperature changes; this is in contrast with previous studies (Myrick and Cech, 2000; Ojanguren and Braña, 2000; Lough, 2007; Johansen and Jones, 2011; Johansen et al., 2014) where a smaller temperature range acquired by changing fish tank water temperatures had the potential to cause unrealistic fish trajectories or ignore possible adaptations within a natural environment.

#### should read:

We have utilized almost a year's worth of data from observations made in the wild under naturally occurring temperature changes; this complements previous studies made in the laboratory (Myrick and Cech, 2000; Ojanguren and Braña, 2000; Lough, 2007; Johansen and Jones, 2011; Johansen et al., 2014).

#### The last sentence of the Introduction that reads:

We have discovered that the swimming speed of *D. reticulatus* at higher temperatures is greater than at lower temperatures, thereby contradicting previous studies on D. Reticulates (Johansen and Jones, 2011) and other reef fish species (Myrick and Cech, 2000; Ojanguren and Braña, 2000; Lough, 2007; Johansen et al., 2014).

#### should read:

We have discovered that the swimming speed of *D. reticulatus* at higher temperatures (but below the species' optimum) is greater than at lower temperatures.

## The third sentence of the Discussion that reads:

This result contradicts previous claims by Johansen and Jones (2011) and Johansen et al. (2014), which were based on evidence acquired using fish tanks and which utilized a narrower temperature range.

## should read:

This result is complementary to Johansen and Jones (2011) and Johansen et al. (2104), who reported on the swimming behaviour of *D. Reticulates* at 29 °C and 32 °C in tanks.

#### The fourth sentence of the second to last paragraph of the Discussion that reads:

Our data suggest that fish speeds increase over this temperature range, even up to  $\sim$ 30 °C, which contradicts earlier studies.

#### should read:

Our data suggest that fish speeds increase over this temperature range.