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Sex-changing animals obey the laws of nature

Species that automatically change sex do so when they reach nearly three-quarters of their maximum size, neatly proving a cornerstone of evolutionary theory, scientists say.

Dozens of animals species, from types of fish and crustaceans to molluscs and worms, spontaneously change sex as a result of the pressures for survival and reproduction.

In the case of the clownfish, a favourite of aquarium-lovers, the gender-bending is taken to extremes - males can not only switch to female, but also increase in size to become the alpha-breeder in their piscatorial group.

Biologists David Allsop and Stuart West of Edinburgh University in Scotland studied 77 sex-changing species, ranging from a tiny shrimp, the Thor manningi, to a 1.5-metre fish called a black grouper.

They found that the creatures swapped gender when they reached 72 per cent of maximum size, regardless of mating system, sex-change mechanism and other factors.

"This suggests that there is a fundamental similarity across all animals... in the underlying forces that select for sex change," they write in the latest issue of *Nature*, the British weekly science journal.

Under evolutionary theory, an individual is at most pressure to change gender when there is a serious imbalance between the sexes and it has reached an age and size where it can do the switch successfully and contribute quickly to the gene pool.

-- AFP

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