{rokbox title=|Corvina :: Foto: © Textos-fotos-videos-dibujos: Merche S. Calle / Juan Enrique Gómez (Magazine online Waste| thumb=|images/stories/ieo/imagenespublicaciones/argyrosomus-regius-thumb.jpg|}images/stories/ieo/imagenespublicaciones/argyrosomus-regius.jpg{/rokbox}

M. M. Gil, M. Palmer, A. Grau, **S. Deudero**, J. I. Alconchel and I. A. Catalán, (2013). **Adapting to the wild: the case of aquaculture-produced and released meagres *Argyrosomus regius***. Journal of Fish Biology. doi: 10.1111/jfb.12241

Abstract: The performance of juvenile *Argyrosomus regius* released off the coast of Mallorca Island (Balearic Islands, Spain) was assessed by comparing the body condition, stable isotope signature and stomach contents of aquaculture-produced *A. regius* that had been released, fished and returned by fishermen after spending from a few days to >1 year at liberty with *A. regius* reared under controlled conditions on two contrasting diets (well-fed and unfed). During the first 40 days of the experiment, the condition index (KR) of the returned *A. regius* and the unfed *A. regius* followed the same decreasing trend. Thereafter, the KR values of the returned *A. regius* were significantly higher than those of the unfed *A. regius* but never reached the values of well-fed *A. regius*. The δ13C signal of the returned *A. regius* clearly increased (in comparison with the well-fed *A. regius*) after they had spent a few months at liberty. The temporal pattern depicted by the stable isotopes and the most likely prey composition inferred from this pattern strongly suggest a shift in diet. The stomach contents of the returned *A. regius* that had spent minus 100 days at liberty consisted almost exclusively of decapods. The diet of the few returned *A. regius* that had spent >100 days at liberty consisted entirely of fishes. Wild

A. regius
from the remaining fishery on the Spanish coast exhibited the same ontogenetic diet shift from invertebrates to fishes, but at a smaller size threshold. Overall, the results demonstrated that culture-reared
A. regius
experience adverse conditions during the first days after release into the wild but that at least some
A. regius
are able to adapt to the natural environment after a few months at liberty.

Keywords: condition index, diet, restocking, stable isotopes, time at liberty