



# Rearing Javan green magpies using an adoption by parents method

April 24<sup>th</sup> 2020, By Lenka Pastorcakova and Antonín Vaidl, Prague Zoo

On Tuesday, February 4, a chick from one of the rarest birds in the world, the Javan green magpie, hatched at Prague Zoo. Although they are experienced parents, they have destroyed several of their previous clutches and even killed their offspring. Javan greens are very sensitive birds and even a slight disturbance can lead to a fatal move. Therefore, the 5.85 g chick was reared in an incubator to prevent further loss. It was fed with a specially made hand puppet that evoked the chief signal of the parents – a red beak and a black dot on a vibrant green head.



Adult Javan Green Magpies in Prague Zoo. Photos: Antonín Vaidl, Curator of Birds

Experience with breeding using an artificial hand puppet was first gained in the spring of 2018. The chick was successfully reared and in July 2019 it left for Whipsnade Zoo in Britain. Although the method of rearing using a puppet seems very good with respect to the individual's ability to breed in the future, it is no replacement for the parents. Young reared with a puppet may find socialisation difficult in the future, especially when it has no siblings and it may tend to gravitate towards people. Therefore, it was decided to use a method of foster care by its own parents for the first time with Javan greens.



The young chick in the nursery of Prague Zoo. Photos: Antonín Vaidl

At the age of 24 days the chick started to leave the nesting basket in the incubator, therefore it was moved, along with the basket, to a previously prepared cage that had been placed in the parents' aviary. Almost immediately the chick began to clamour for its parents, even though it had never seen them before. Neither the chick nor the parents could have sensed their familial relationship at this stage,



Reared with the help of a puppet. Photo: Petr Hamernik, Prague Zoo

but the chick's clamouring at the sight of the adult Javan greens' signal markings awakened parental behaviour in the adult couple. In the end, such clamouring from the already feathered chick was a strong incentive for the male to first protect the surroundings of the cage and, after two days, to fully take over the parental duties and feed the chick through the cage. When the chick stopped responding to the hand puppet, the cage was opened. The parents began to vie with one another as to who would feed the chick first.



The young in the aviary of its parents inside a smaller cage. Photos: Antonín Vaidl

### Transition from puppet feeding to parent feeding



Puppet feeder. Photo: Antonín Vaidl.



Photo: Pavel Kovarik

Father secretly photographed feeding the chick through the mesh by his keeper Pavel Kovarik

This method was first applied when breeding Rufous-fronted, Sumatran or White-throated laughing thrushes, but this year was the first time it was used with a representative of the corvid family, which are renowned for their cleverness and caution. There is a strong belief that this method will help eliminate unsuccessful attempts at breeding and will lead to an increase in the number of chicks from this endangered species.





The first Javanese green magpies came in 2015 from Chester Zoo. The male was caught in the wild, the female came from the Cikananga Wildlife Centre in Java, which Prague Zoo has supported for many years. The first successful breeding at Prague Zoo was in 2016 and since then 5 Javan greens have been bred. Fledglings have been sent to the zoos in Newquay, Waddesdon and Whipsnade in the UK, as recommended by the EEP Coordinator. Prague Zoo is still the only European zoo outside of the UK that keeps this species and, together with Chester and Jersey Zoo, it is one of three European zoos to breed this critically endangered species.



*The fully fledged young fed by its parents with plenty of delicious insects. Photos: Antonín Vaidl*