



SIRENBIRD

(also known as a Superb Lyrebird in the non-magical community)

M.O.M. classification: XXX

A striking bird native to Australia, the sirenbird (or superb lyrebird amongst muggles) is a ground-dwelling avian with an extraordinary ability to mimic both natural and unnatural noises from their environment. Classified as, *Menura novaehollandiae*, this large songbird makes up for its muted colors with an elaborate tail. Ranging from 86 cm to 1 m and weighing around 1kg makes the sirenbird one of the largest songbirds in the world. Adult males have tails that can reach 70 cm long and have a distinguished look similar to that of the lyre it was named after by muggle scientists (Dalziell & Magrath 2012). In the Wizarding World, however, the sirenbird is said to have been named after both the sea-dwelling Sirens, whose voices are said to lure people to their deaths, and the syrinx, a bird's voice box. This holds true as their uncanny ability to mimic any and all types of sounds can be dangerous for both wizards and muggles. This makes them an XXX threat classification within the Department for the Regulation and Control of Magical Creatures as established by the Ministry of Magic.

EVOLUTION: The syrinx is the vocal organ, or voice box, of birds and is found at the base of the trachea where it forks into the bronchi leading to the lungs. This allows birds to create a multitude of sounds. Typically, in songbirds the syrinx is made up of four pairs of syringeal muscles, however, sirenbirds possess only three. This makes the syrinx extremely flexible and allows for a near unlimited ability to create sounds (Dalziell & Magrath 2012; Goller & Shizuka 2018). The reason for such a specific adaptation is actually quite simple. Mating. Male lyrebirds are distinguished by both an elaborate courtship display and their ability to accurately mimic a variety of sounds. These can include calls from other birds and creatures. Males can spend up to one year perfecting their pitch and adding more sounds to their repertoire (Zann & Dunstan 2008). Vocal mimicry likely evolved overtime due to sexual selection within this species and is not an ancestral trait amongst sirenbirds and other songbirds (Goller & Shizuka 2018).

FUNCTION: As previously mentioned the most significant reason vocal mimicry evolved in sirenbirds was due to sexual selection by females for males. Females tend to prefer males with a wide range of vocalizations and they in turn will serenade the females to the best of their ability. Not only do their talents win them mates but they are also a way for the birds to claim and protect their territory. The superior vocal ability of the sirenbird can also potentially reduce the risk of predation. This depends on if they have learned to mimic the call of perhaps a larger predator or another daunting sound (Dalziell & Magrath 2012; Dalziell et al., 2015).

There are drawbacks however to having such a particular talent as these birds can have negative effects on the species around them. Since sexual selection is the most important reason for sirenbirds to have developed this behavior then it is prudent that over time the behavior become more and more accurate. This can have both physiological and cognitive repercussions in the species. To improve the quality of vocal mimicry birds may have to invest more energy into the production of sound and cut back on the fitness of other functions. The strain of needing more and more types of mimics could also put a strain on the birds (Dalziell & Magrath 2012; Dalziell et al., 2015). Another drawback can affect other species since sirenbirds are so adept at mimicking the sounds of other species, those other birds can mistake mimics in place of their own species. This can lead to wasted time and energy amongst other species potentially lowering their fitness (Dalziell & Magrath 2012; Dalziell et al., 2015).

MAGICAL USES: Several parts of a sirenbird may be used in advanced level potion making as described in copies of *Magical Drafts and Potions* and *Advanced Potion Making*. The most common potion including these ingredients include $\frac{1}{4}$ part of sirenbird larynx in Voxjuice Potion (a derivative of Polyjuice Potion) which allows a wizard to utilize the mimicking ability of the sirenbird for 10 minutes. Other uses include sirenbird tail-feathers for quilts and decorative brooches.

SOURCES:

- Dalziell, A. H., & Magrath, R. D. (2012). Fooling the experts: Accurate vocal mimicry in the song of the superb lyrebird, *Menura novaehollandiae*. *Animal Behavior*. doi:10.1016/j.anbehav.2012.03.009
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- Goller, M., & Shizuka, D. (2018). Evolutionary origins of vocal mimicry in songbirds. *Wiley Online Library*. doi:10.1002/evl3.62
- Zann, R., & Dunstan, E. (2008). Mimetic song in superb lyrebirds: Species mimicked and mimetic accuracy in different populations and age classes. *Animal Behavior*. doi:10.1016/j.anbehav.2008.05.021

Lyrebird Picture: <https://www.cleanpng.com/png-lyrebird-line-art-beak-drawing-clip-art-1604386/>

Lyrebird Tail Feather: <https://bluethumb.com.au/jahne-meyer/Artwork/lyre-bird-178590>

