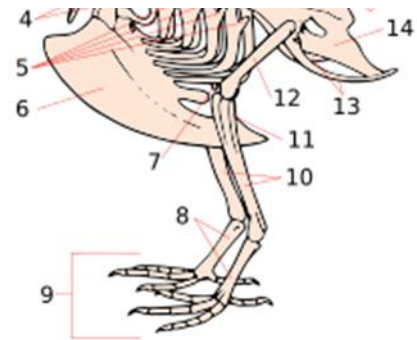


There is more to a bird's leg than meets the eye

Have you ever wondered why a bird's knee seems to bend the wrong way??

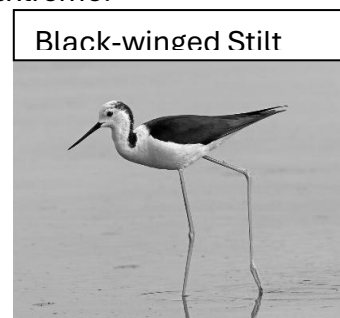
There is a simple answer – it's not a knee it's an ankle.

The leg on a bird works very much like our legs, working from the top down. There is a thigh (femur), then a knee (patella). However, the thigh is quite short and usually covered in feathers and out of sight. So the first limb that you can see is the one below the knee which is equivalent to our shin. You then get to the ankle, which bends the same way as our ankle, but then it gets different. The long bone on a bird's leg between the ankle and the feet is a fused and extended tarsus, called a tarsometatarsus – the equivalent on humans runs along the top of the foot. The feet are attached to the bottom of this tarsus. On many birds, such as waders and herons, this extended tarsus is very long. It thus allows birds to exploit habitats such as water edges and swamps. In bird such as Stilts the long “legs” are taken to an extreme!

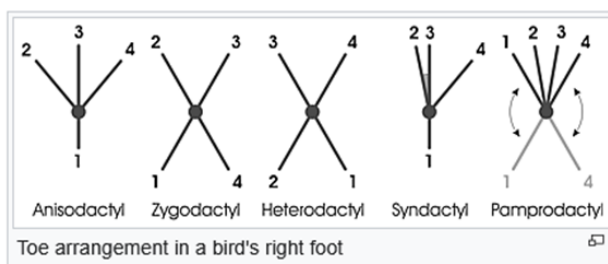


- 7. patella
- 8. tarsometatarsus
- 9. digits
- 10. tibia (tibiotarsus)
- 11. fibula (tibiotarsus)
- 12. femur

Birds can “sit down” on their ankles – this is how they sit when they are brooding chicks. Young birds also often adopt this position in the nest. Some birds can also “sit down” on their knees – I have picture of a Lesser Rhea with its long legs stretched out behind it - it must be sitting on its knees!



So now we need to think about feet! Bird's feet are amazingly varied - they usually have four toes but many species have less – Ostriches have two and many birds do not have the “back” toe (e.g. Sanderling) or sometimes it is reduced to a small claw.



Here is a diagram showing some of the many toe arrangements on a bird's foot. Woodpeckers are Zygodactyl – two forward and two back - as it is a good arrangement for climbing up and down trees. Parrots also have two forwards and two back (Heterodactyl) but they are

differently arranged! The most common arrangement for perching birds is Anisodactyl – this format allows them to grip branches, and indeed they can keep that grip going even when asleep.

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