Over(bird)watch

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The video game *Overwatch* is Blizzard Entertainment’s new hit, released on May 2016 for Microsoft Windows, PlayStation 4 and Xbox One. In the game, the so-called “heroes” spend most of their time trying to kill each other to secure a payload. While the morals of these self-proclaimed heroes are rather open to debate, one of them at least has some redeeming personality traits. The hero Bastion is a nature-loving animal-friend robot. Actually, the single animal to appear in the whole game (besides the hominids, of course) is Bastion’s pet bird, called Ganymede (Fig. 1).

Ganymede’s design is an original creation of Blizzard’s artists, although it resembles in shape and size a northern cardinal, *Cardinalis cardinalis* (Linnaeus, 1758), a common species in Canada and the USA. Cardinals usually have a red plumage (Fig. 2A), but there are rare naturally occurring yellow mutants, called xanthochroic cardinals (Fig. 2B). Ganymede also has a white area around its eyes, a trait not seen in cardinals, but well-known from species of the genus *Zosterops* (commonly known as “white-eyes”; Fig. 2C), which live in tropical Africa, Southeast Asia and Australasia.

Figure 1. Left: Bastion with Ganymede (official artwork from the game). Image extracted from Overwatch Wiki. Right: Ganymede (official artwork from the game). Image extracted from “Bastion Reference Kit” (official Overwatch website).
Despite being based in an American species, Ganymede seems to be native to European forests. The bird appears on its home forest in the animated short *The Last Bastion* (from August 2016), which takes place in the outskirts of Stuttgart, Germany. There is no bird here in Stuttgart that looks like Ganymede (one of us lives here, by the way). Actually, in the whole European bird fauna, only the golden oriole, *Oriolus oriolus* (Linnaeus, 1758), comes close to it, with its yellow color and dark horizontal stripe across the eyes (Fig. 3). However, its slenderer body shape, thinner beak and lack of crest are all very different from Ganymede.

Moreover, in the *Eichenwalde* stage (which, in the game’s lore, is located nearby Stuttgart), there is a painting resting above the hunting lodge’s fireplace (Fig. 4). This painting shows four local bird species; one of them is the “Ganymede species”, while the others seem to be actual species: the Eurasian blue tit (*Cyanistes caeruleus* (Linnaeus, 1758)) and two titmice. The latter are American species and seem to represent the tufted titmouse (*Baeolophus bicolor* (Linnaeus, 1766)), even though one of them is more bluish in color.

As we pointed out before, Ganymede’s design is an original creation and does not represent an actual species, although some of its features might be traced to the cardinal. Despite the problems with Ganymede’s identification, Bastion’s bird friend can also appear in the guise of actual real-life bird species. To do so, the player must simply equip a “skin” for Bastion (“skin” is basically the gaming jargon for
“outfit”). By changing Bastion’s “skin”, Ganymede’s appearance may also change.

The common and rare skins (alongside the legendary Overgrown skin) do not change Ganymede’s appearance, but the epic and legendary skins do. Here we identify all the bird species that most resembles Ganymede’s look and tell a little bit about their biology.

Figure 4. Fireplace of the hunting lodge in the Eichenwalde stage, with close-up of the painting. Screenshots from the game.

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Let’s start with the “proper” red northern cardinal, Cardinalis cardinalis (Fig. 5A). This species belongs to the family Cardinalidae and is also commonly known as redbird, being easy to identify due to its color, black “mask” and crest. Ganymede appears as a male cardinal (females are light brown). These birds eat mainly seeds, grains and fruits, but feed their young with insects. They are found from Belize and Guatemala, through Mexico and eastern USA, all the way to Canada. The species was introduced by humans in other American states, like California and Hawaii. Cardinals are common in residential areas and visit bird feeders. They were prized as pets due to their bright plumage and song, but thankfully now have full legal protection.

Next, we have Ganymede appearing as a blue jay, Cyanocitta cristata (Linnaeus, 1758) (Fig. 5B). This species belongs to the family Corvidae (ravens, crows, jays and magpies) and has a distinct color pattern. As a matter of fact, the color pattern of Ganymede’s wings is a little bit simplified when compared to the actual bird’s complicated gradation of colors. Blue jays can be found in central and eastern USA and Canada; they eat nuts, grains and small invertebrates. These birds are typically monogamous, pairing for life; genders are similar in plumage and size. Blue jays are very intelligent, with complex social systems.

Bastion’s two “wooden” skins are fittingly accompanied by a Ganymede looking like two species of woodpeckers (family Picidae): the red-naped sapsucker, Sphyrapicus nuchalis Baird, 1858 (Fig. 6A; although it is also reminiscent of the pileated woodpecker, Dryocopus pileatus (Linnaeus, 1758), and the downy woodpecker, Dryobates pubescens (Linnaeus, 1766)) and the Arizona woodpecker, Leuconotopicus arizonae (Hargitt, 1886) (Fig. 6B). The sapsucker, as its name implies, drills hole in trees to feed on the plant’s sap, also eating insects that are attracted to the sap. These birds can be found throughout the Great Basin region and the Rocky Mountains, in North America. The Arizona woodpecker has a more restricted range, occurring in the southern parts of Arizona (obviously) and New Mexico, USA, and in western Mexico. This species feed mainly on insects (especially beetle larvae), but may also eat fruits and acorns. Similar to the case of the blue jay above, the color pattern on
Ganymede’s head, chest and wings are very simplified in relation to the real animals. Also, there is some divergence in color: while the male Arizona woodpecker has a red crest, Ganymede has a yellow one, which makes him more similar to female woodpeckers.

The last two of Bastion’s skins are based on steampunk designs. Therefore, they needed a more city-dwelling bird to accompany him. Ganymede thus appears as a rock pigeon, *Columba livia* Gmelin, 1789 (family Columbidae), the common pigeon we have in large cities. The *Gearbot* skin has a common rock pigeon (Fig. 7A), while the *Steambot* skin is accompanied by an albinistic pigeon (Fig. 7B). We judge it is an albinistic (instead of a leucistic; see Box 1 below) bird, because the beak also does not have the usual black pigmentation (it is pinkish yellow). We could not check if the same is true for Ganymede’s legs, though, as we have yet to unlock this very expensive skin in the game.

Unsurprisingly, all the birds above are American (Blizzard’s headquarters is in California). As explained above, the depictions are not completely true-to-life, but simplified in some instances. This is to be expected, we guess, since the game’s developers would not need focusing too much on a scientifically accurate depiction of a bird. They would rather be more...
worried about making all the shooting fun. Nevertheless, it seems the team at Blizzard clearly put a lot of effort in making Ganymede, as not only his appearance but also his movements in the game are all very realistic (the model for Ganymede in the animated short *The Last Bastion* was done based on the pet parrot of a Blizzard employee). The two pigeon “skins” for Ganymede even change his body shape to make him look like a pigeon.

![Figure 6](image_url)

**Figure 6.** Bastion’s skins, accompanied by a close-up of Ganymede and a photo of the actual bird species in which he was based. Bastion’s skins are screenshots from the game; the images were extracted from Overwatch Wiki. **A.** Bastion’s *Antique* skin. Red-naped sapsucker, *Sphyrapicus nuchalis* (photo by Glenn Bartley, 2011; extracted from Glenn Bartley Nature Photography, used with permission). **B.** Bastion’s *Woodbot* skin. Female (left) and male (right) Arizona woodpecker, *Leuconotopicus arizonae* (photos respectively by Alan Wilson, 2007, and Nature’s Pics Online, 2007; images extracted and modified from Wikimedia Commons).

**MALE OR FEMALE?**

Nevertheless, despite all the care in making Ganymede, there are some major inconsistencies (besides the whole “American-bird-in-German-forest” issue discussed above). Until Gamescom (in August 2016, when the animated short *The Last Bastion* was premiered), we supposed that Ganymede was a male. This was based on: (1) the name, which is a male one (originally from Greek mythology); (2) it is crested and colorful, which is common of male birds, while females often have a plainer look; and (3) it sings a lot, which is also a typical male activity in birds (usually used for defending territory or courtship).
Figure 7. Bastion’s skins, accompanied by a close-up of Ganymede and a photo of the actual bird species in which he was based. Bastion’s skins are screenshots from the game; the images were extracted from Overwatch Wiki. A. Bastion’s Gearbot skin. Rock pigeon, *Columba livia* (photo by Diego Delso, 2012; image extracted and modified from Wikimedia Commons). B. Bastion’s Steambot skin. Albinistic rock pigeon, *Columba livia* (photo by Maria Corcacas; image extracted from Project FeederWatch, a partner organization of the Cornell Lab of Ornithology and Bird Studies Canada, used with permission).

Box 1. Albinism and leucism

Both albinism and leucism are genetic variations, meaning they are conditions defined by the genes the animal inherits from its parents. Albino animals show a complete (or partial) absence of the pigment called melanin in their skin, hair, feathers, scales, cuticles and irises. Melanin is responsible for brown and black colors. Thus, albinos are very light-skinned, with white hairs and red eyes (the lack of pigment in the eyes means that the light is reflected by the blood vessels). This failure to produce melanin is usually caused by the absence or malformation of an enzyme involved in its production. Common albino animals include white lab rats and mice and rabbits. People with albinism are also rather common.

In leucism, however, there is only partial loss of pigmentation. This means paler hairs (or feathers, etc.), often “creamy” in color, but with no changes to the eyes. It is also different from albinism in another regard: leucism is a reduction in several types of pigment, not only melanin. Leucistic peacocks are very commonly bred in captivity and leucistic lions are a fan-favorite in zoos.

On the opposite side of albinism, there is a condition called melanism. The over-deposition of the black pigment melanin in hairs (or feathers, etc.) results in very dark animals, like the black jaguar.
However, in the aforementioned animated short, Ganymede is building a nest, which is typical female behavior. It is very rare for male birds to do the nest building (this is only seen, for instance, in species of weavers and megapodes). Moreover, Bastion's Overgrown skin, which relates to the short, has a nest with eggs placed on the robot's shoulder (Fig. 8). Needless to say, only females can lay eggs. Moreover, the incubation and hatching is usually also done by females; male birds only rarely incubate eggs. Of course, the eggs from the Overgrown skin are way too large (Fig. 8) to belong to Ganymede anyway.

Ganymede’s sex is never directly alluded to in the game or official material, although sometimes we could find the pronouns “he” and “his” referring to it on Blizzard’s websites. Curiously, the same is true for Bastion, who is almost always referred to by the pronoun “it”, but sometimes by “he”.

**BIRDWATCH**

The player can also customize Bastion’s victory pose, which is shown after the match if he/she was part of the winning team. One of Bastion’s poses is called Birdwatching, because, well, he is watching his bird (Fig. 9).

It might sound surprising to some that birdwatching is not only an actual pastime but a very popular one at that. But what exactly is it?
Birdwatching, also called birding, is basically an activity of wildlife observation, where you go out to observe, of course, birds. You can do this, of course, with the naked eye, but it is better done with a good pair of binoculars (or sometimes a telescope). It’s a hobby that actually attracts a huge lot of people (Fig. 10), especially when a rare bird is involved. There are, of course, guides for beginners explaining everything about how to start birding, like *Birding for Beginners: A Comprehensive Introduction to the Art of Birdwatching* (by S. Buff, 2010), and websites like *All About Birds* (by the Cornell Lab of Ornithology).

![Figure 10. Birdwatchers (often called simply “birders”) at Caerlaverock, UK, watching a rare (in Europe) White-tailed Lapwing, Vanellus leucurus (Lichtenstein, 1823). Photo by MPF (2007); Image extracted and modified from Wikimedia Commons.](image)

Moreover, birdwatching actually involves a lot of hearing, because you will most often hear the bird before seeing it (if you see it at all). Thus, it is also good to know what each species’ vocalization sounds like. There are several websites to identify birds’ calls, such as the *Smithsonian’s Guide* (see References below). Of course, both for image and song identification, there are now lots of apps, such as *eBird Mobile, BirdsEye, Collins Field Guide* and *Bird Song Id*, among several others. Unfortunately, these websites and apps are still largely restricted to the USA and Europe, while the greatest (and some would say most splendidous) bird diversity is found in Australasia and tropical America.

Birdwatching is all about enjoying nature and having fun, but birders worldwide abide by
a “code of conduct” of sorts (see, for example, the code of the American Birding Association). Nowadays, our more ecological-prone society is concerned about the impact that our activities have on the animals and their environment. Thus, birdwatching etiquette usually includes promoting the welfare of birds and their habitats, limiting the birders’ impact (photographing, using playback devices, keeping your distance from nests etc.) and thus mitigating the stress caused to the animals. Basically, have fun, but let the birds live their life – that’s what Bastion does anyway.

REFERENCES


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ABOUT THE AUTHORS
Barbara Tomotani is a birdwatcher bird-scientist and was a marked presence at Blizzard’s store booth during Gamescom, hoping to find a Ganymede plush.
Rodrigo Salvador is a biologist, but now is found mostly escorting payloads as either D.Va or Lúcio. He has his fair share of Plays of the Game as Bastion, though.