JAWAGORA

(Spp)

- **Height:** Largest species 2ft (surf jawagora), smallest species 6in (fairy jawagora)
- **Classification:** Cob'li po-fea (live-bearing, cold-blooded, feathered animals, usually with four fins and two legs)
- **Differences between sexes:** Most species have no sexual dimorphism, but in some species the males are more brightly coloured than the females
- **Life expectancy:** Varies from 5 years (fairy jawagora) to up to 15 years (predator jawagora)
- **Diet:** Dependant on species; primarily seaweed/freshwater aquatic plants and/or invertebrates, and in some species, small vertebrates

Jawagora is a taxonomic Order of small semi-aquatic animals, currently numbering 12 extant species. While none are widespread throughout the planet Kaleida, most species are locally common. Most jawagora species are staple prey for animals further up the food chain.

Physiology

Jawagora possess feathers which, in most species, are adapted to an environment that is partly aquatic or otherwise difficult for the maintenance of 'standard' feathers: some species have quills that function as bristles, spines, for communication, or for camouflage in meadows or the borders of lakes and rivers.

Most jawagora possess a beak, although in a few species these have evolved away. They possess both lungs and gills, with the latter being rather inefficient but in most species, still functional.

All species have strong legs. Most are adapted to run fast, but one, the surf jawagora, is better adapted to hold its position in the breaking waves of the coast.

Most species, though not all, possess two pairs of external fins. These are used for cooling, steering while running, communicating, or swimming or drifting in river currents.

Taxonomy

The Jawagora Order is broken down into four Families: True (the pectoral fins remained and the tail fins evolved away), Finless (all the species' fins evolved away), Predator (the species developed adaptations to feed exclusively on vertebrates), and Tailfin (the species' tail fins remained, and the pectoral fins evolved away). [Note: I've barely commented on colour and patterning, if at all. For now I want to hold back on deciding about that until I know more about the colours of the plants and geology where these animals live.]

True Jawagora

Plains Jawagora

Appearance: One of the more slender members of the jawagora group. Its toes are tightly-packed to form pseudo-hooves, which help it to run easily on dry land. This adaptation has allowed it to expand its range from coastal or river areas.

Although like all true jawagora it has two sets of fins, the front two are in the process of evolving away, as the species has little use for them. The rear fins assist with steering while running, which helps this creature evade predators. Aside from this, the rear fins help with cooling the animal.

It has a patch of feathers on the back of its head. [Do I want these to be for communication or as camouflage? They could look like sprigs of grass.]

Diet: Uses its small beak to pluck Kaleida's equivalent of termites and freshwater shrimp out of tight spots or crack seed casings.

Shelter: Plains jawagara make shallow scrapes. It is thought that their wide rear fins catch on the walls of burrows.

Predators: [Unknown what these are for now.]

Reproduction: Mating happens during the dry season. During the wet season the female gives birth to around twenty babies, which quickly imprint on her and follow her around. The young benefit from the moistening effect of the rain, which allows their gills to develop properly. Poorly moisturised gills can become infected and this has an impact on the number of babies that reach adulthood. A visit to the river can be helpful, but the

river can be a dangerous place for plains jawagora, given their reduced efficiency in water thanks to their dry-land adaptations.

Range: The plains jawagora lives on the grasslands around the River Genn. They occasionally cross the Genn during the dry season, and individuals with a bolder spirit sometimes swim across.

Fairy Jawagora

Appearance: A similarly dainty beak allows the fairy jawagora to eat in much the same way as its plains cousin. The animal's better adaptation to water gives it an advantage in picking food off the river bed so this is where it finds most of its food.

Diet: The fairy jawagora favours a diet of invertebrates more so than plant matter, but it will take pieces of aquatic plants rather than go hungry.

It saves energy while feeding by allowing the river's current to catch its fins and carry it along. It drifts above the river bed and picks off whatever it can see as it goes.

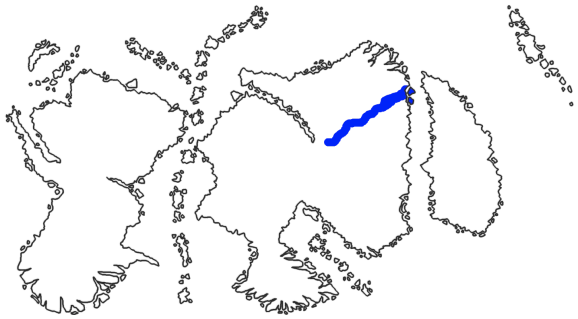
Shelter: The nature of this animal's feeding style means that it can emerge onto land up to a kilometer from its starting point. It spends little effort, therefore, on digging and protecting the ideal home. Most individuals of this species settle for the night under overhangs on the river bank, and the most digging it is likely to do is a few cursory scratches to establish a bowl to sleep in.

Predators: The fairy jawagora is small and quick on its feet - and so are most of its predators. Nothing else finds them worth catching. It can deliver a very un-fairy-like slap with its tail, which is strong for its size, if needed, and this is often enough to push a predator away, giving the fairy jawagora a precious extra second to flee.

Reproduction: Fairy jawagora are opportunistic when it comes to mating. If an adult of each sex meet while feeding, one will often perform a courtship dance, which involves hypnotic movements of its fins. If the other is willing, then they mate before parting ways.

Within two weeks the female gives birth to between seven and ten youngsters, and goes about her usual feeding routine. Her offspring follow her, making use of their gills to breathe underwater and learning from her, what is good to eat.

Range: This species is more suited to aquatic living than the plains jawagora, and its population is more restricted to the Genn itself than its more comfortably terrestrial cousin.



Spiny-skirted Jawagora

Appearance: This animal's beak is longer than those of the plains and fairy jawagoras, giving more space for serrations. This provides the animal with an excellent grip on its food.

At first glance this jawagora appears to be finless, but that is not the case. Its fins are small and narrow to the point of being indistinguishable from the quills along its flanks. It uses its fins to tilt the angle of its quills and the fins that span between them, to improve its maneuverability when running. If the animal is caught by its tail it delivers a sharp kick with the spike on one of its hocks.

Diet: Spiny-skirted jawagoras feed on a mix of invertebrates and aquatic plants.

Shelter: These animals take a communal approach to burrowing. Mountainsides offer the opportunity for them to dig with more ease than on horizontal ground. They dig a little per day, starting with a small scrape into which they fit their bodies, and digging deeper into the slopes every day until the scrape becomes a serviceable burrow. Then a small group of them will share the space.

Predators: The spiny-skirted jawagora uses its spines to surprise predators when it is being chased. If a predator catches up with it, it clubs it with its tail or flank. The hurt and surprised predator is distracted for a few seconds, or loses its footing - a lethal mistake on a steep mountainside.

Reproduction: Males competing for a mate do not attack one another with their spiny skirts. Instead they turn their backs and attempt to kick each other until one gives in.

Females come down from the steeper slopes to give birth in the early summer and raise their young - a litter is normally around 12 in number - in the flatlands and foothills.

Range: An inhabitant of the northern Blisters, particularly the lakes that form in this area. The Blisters are hills and mountains, which means they generate wet weather. This in turn creates lakes and tarns that the semi-aquatic jawagora are adapted to thrive in. Being able to shock predators into losing their footing would be a helpful adaptation for these jawagora, which may explain their spiny skirts.

Khajule

Appearance: One of the more aquatic-adapted of the jawagoras, with the largest eyes of any species in this Order.

Its beak is the shortest, and it has a very mobile mouth. Its nostrils are well-developed for a jawagora, and much higher on its head than its gills.

Diet: The khajule is a nocturnal hunter, and prefers invertebrates. It spends much of its time hiding in cold water in shadow so needs to warm up before hunting. It does this by waiting until night and then basking on rocks to absorb their residual warmth. Then it hunts invertebrates, which are more calorific than plants.

Shelter: The khajule prefers underwater burrows, where it is very capable of hiding for extended periods of time if necessary. Its large eyes allow it to see in the very low light of underwater burrows, caverns, and caves, and it uses this to emerge at night to bask on the warm rocks around the River Stou, before hunting.

Predators: Its well-developed nostrils allow this species to stand or float in water with its nostrils above the surface and its gills below, which allows it to bask in the shallows where it can disappear beneath the surface at a moment’s notice.

It also lives in large groups, and this gives the group many pairs of eyes with which to watch for danger.

Reproduction: Litter sizes range between 10 and 20, and youngsters tend to be more active than the adults. They move incessantly beneath the surface, warming themselves with their own muscle movements as they seek plant matter to eat and only occasionally hauling out onto the shore to bask. The mother plays a minimal role in raising them personally; rather, the whole adult community watches for danger and tips the youngsters off when danger is around.

Range: The khajule is restricted to the River Stou and the lakes of the foothills of the southern Blisters. It never strays far from the cover of water.

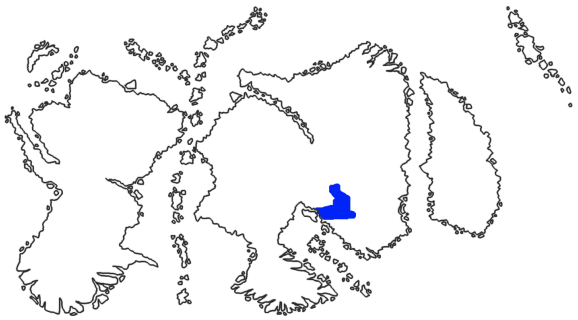
Fake-eye Jawagora

Appearance: As its name suggests, the fake-eye jawagora has a pair of false eye spots on top of its head. This helps to discourage predators who spot them from above.

Diet: With the strongest jaw for its size of any jawagora, the fake-eye is capable of taking larger invertebrates, and it does so. It is beakless with impressive teeth for a True jawagora, and it has been known to catch small vertebrates.

Shelter: It shares a range with the khajule but is more than twice its cousin's size. Perhaps if it were only slightly bigger it would compete with the khajule for burrows, but it cannot fit into the khajule's burrows. It doesn't seek shelter and instead focuses its effort on basking and does so during the day. Its false eyes help it to stay safe at this time.

Predators: With the jawagora being the size it is, it makes a more promising meal for predators. Luckily, its habit of basking during the day - plus its home range being generally warm - it can move quickly when threatened.



Reproduction: Males display for females by flaunting their throat-flaps. Females give birth to around 6 offspring per litter,

and the young follow her around, feed when she feeds, and bask when she basks. She becomes a messy eater when raising young, leaving scraps that her young snap up, until they are big enough to catch their own food.

Range: The grassy land around the River Stou and the wetter parts of the surrounding areas.

Finless Jawagora

Surf Jawagora

Appearance: Short, soft, dense feathers keep the surf jawagora warm as it seeks out its food in rock pools and the surf breaks over it. Strong legs and a sturdy tail allow it to brace against the constantly-breaking waves, while a grey and dull blue-green colour scheme gives it the appearance of rocks and seaweed - excellent camouflage for this herbivore.

Diet: This jawagora is entirely herbivorous, and exclusively eats seaweed. Its beak is serrated to allow it to grip its food, which is generally smooth and tough, and break mouthfuls free. Its vegetarian diet is so low in calories that it must eat constantly, so this animal stores food in its crop to eat later, or so that it can continue to eat if a predator comes by and forces it to freeze.

Shelter: Most of the beaches surf jawagora feed on are rocky or stony, so shelter is difficult to make. They live entirely out in the open but will seek the sheltered side of rocks if a storm comes in.

Predators: Low gills and high-set nostrils allow it to oxygenate whether it's hiding underwater or not. This is a weighty animal for its size and makes good eating for any predator that can catch one. Surf jawagoras need to spend so much time each day feeding that they will store food in their crops so that they can feed while waiting for predators to leave. They achieve this without giving away their locations by sitting half-in, half-out of the rock pools in which they graze. This way, if they must freeze then they can keep the top halves of their heads above water to watch and breathe, and the bottom halves under water where they can chew unseen.

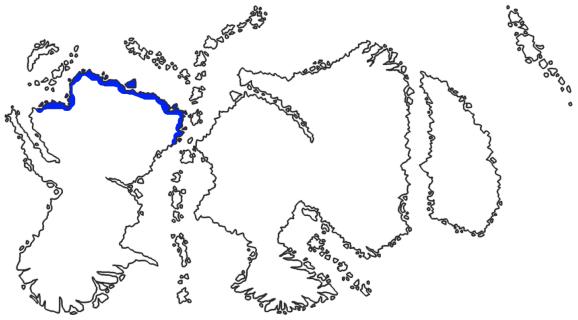
The surf jawagora usually freezes when it detects a predator but will run if the predator gets too close. Entire herds will stampede and run in synchrony; their silvery flanks help them to coordinate and make it difficult for predators to pick one individual out of the group.

This species uses its sheen in another way too: it deliberately runs through rock pools to splash through the water, which further disrupts the animal's outline and makes it even harder for its predator to pick a victim.

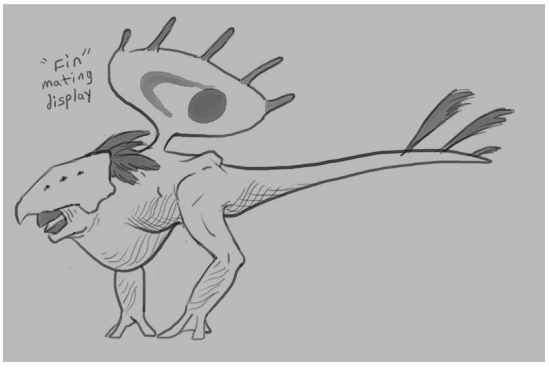
For any animal singled out, its dorsal spines make lunging for it inadvisable.

Reproduction: Surf jawagora have approximately 15 offspring per litter. All the mothers of a community give birth within a month of one another. The offspring imprint on their mother and follow her around for the first few weeks as they learn what to eat and how to find it. As they mature they form into crèches of many dozens, and take to feeding away from the adults. The adults keep an eye on them and if a predator comes by, they work together to lure it away from the babies.

Range: Native to the coast of Boverok. This species looks so perfectly adapted to coastal life that I don't believe they would work their way inland - they find food in rock pools and are made to stand their ground against the constant buffeting of the surf, so where better to put them than here?



Shimmering Jawagora



Appearance: One of the smaller, and more colourful members of the jawagora Order. The richness of its colours offset the dark of the rainforest's shadows so that it can communicate with others of its species. [Note, in any further art of this species I'll ask for a dorsal fin that looks more natural.]

The wattle on its throat is mostly skin and is used by the male as part of its courtship display, which makes it the only jawagora that exhibits sexual dimorphism. These males are much more slender than they look.

Diet: This species' jaws are short and powerful. It eats invertebrates that it finds on the forest floor.

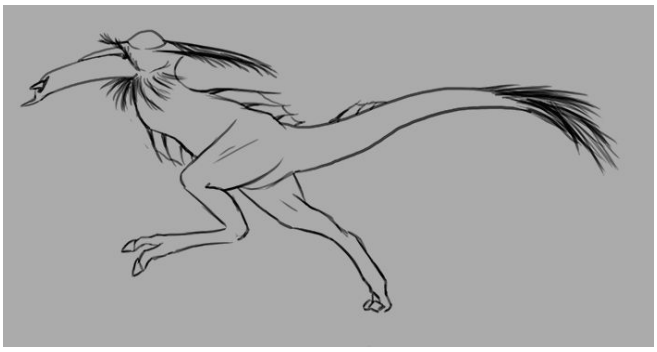
Shelter: Shimmering jawagoras dig their own burrows. The damp rainforest soil is soft enough to make this relatively easy, so they dig the longest burrows of any jawagora. The burrow has one entrance point only, a narrow tunnel, and a chamber where the animal can turn around. When a predator tries to catch a shimmering jawagora it will make for its burrow, turn in the chamber, and face the predator, plugging the tunnel with its face plate. This prevents the predator from being able to catch it, or its offspring.

Predators: The shimmering jawagora's face plate protects it from predators when it's in its burrow, where it does all it can to face the animal that wishes to catch it.

Reproduction: Despite its hard, keratinous face-plate, this animal does not fight for a mate. Instead it displays for them. Its throat wattle is colourful but also effective in making it look bigger than it is. While the males don't fight, it is thought that their apparent size and strength helps entice females.

Range: This species favours the wetter parts of the foothills of The Hot Rains.

Bristle-tailed Jawagora



Appearance: The bristle-tailed jawagora is well-adapted to the higher elevated parts of the Hot Rains. It spends much of its time around the toxic, hot caldera lakes where it feeds on invertebrates. [Note: In any further art of this species I'll ask for the face to be more in line with those of other jawagoras. This one has a liquivore's face which doesn't suit this Order.]

It generally avoids the water but will jump in and paddle to the opposite side to escape predators. It hasn't evolved webbed feet as it doesn't do this often enough, but it does have dorsal and ventral fins which channel the water off its body faster - and the toxins that come with it.

This species is bare except for a few silky feathers on its head and tail, both of which it keeps high and dry when paddling in the lakes. These are colourful, and the animal uses these to communicate with others from across the lakes.

Diet: Mostly flying invertebrates. They may have been eating these for millennia: the bristle-tail's reflexes are fast even by jawagora standards, and they need to be, in order to catch them. The trace amounts of toxins in the flies that land on the lake have given the bristle-tail a limited level of immunity.

Shelter: This species lives in a warm enough environment, that remains warm at night thanks to the heat's underground source, that bristle-tailed jawagora do not need to seek shelter from the cold.

The patches of forest that exist at this altitude are rooted in soil which the bristle-tail scratches into sleeping bowls. They sleep in groups, and in shifts, with half of the group watching for predators while the other half sleeps.

Predators: Bristle-tailed jawagora are hard to catch at the best of times, not least due to their ability to survive occasional paddles through the shallows of the toxic lakes, but any creature that does eat their flesh is likely to be poisoned: their bodies store sulfur from the lakes.

Reproduction: The bristle-tail's bright, shining feathers allow it to court partners, even from across a lake. They do not fight for mates; instead hey dance to show off their feathers and nimble athleticism.

A litter is usually around a dozen in number. Females avoid the lakes and introduce their young to areas dampened by small springs at first, which gives the babies the chance to learn how to catch flies without falling into the lakes. Youngsters would be less able to withstand the high temperatures of the lakes, so the mother only introduces them to the lakes themselves when her offspring are adept flycatchers.

Range: This jawagora thrives in the lakes in the foothills of the Hot Rains and the source of the Rivers Reaven and Eest. It can cope with the toxic chemicals that bubble up from deep within Kaleida better than its lowland cousins.

Crested Jawagora

Appearance: The crested jawagora is one of the most heavy-built of them all. Its jagged outline, thanks to the bristles and spikes on its body, allow it to blend in amongst the plants in the rainforest wetlands.

They are powerful swimmers with strong legs and webbed feet, plus claws for gripping any piece of solid matter - a tree branch, perhaps - that they might rest on.

This species also has a set of fake eyes on top of its head, which helps ward off predators approaching from above.

Crested jawagora are dull-coloured and hard to spot in their natural habitat. The one exception to this is their crest, which hides a brightly-coloured flap of skin.

Despite its water-adaptedness, the crested jawagora can run on solid land, and when it does, it uses the pseudo-fins on its tail for steering. These appear to be fins but are, in fact, secondary fins and not primary limb fins. They help with steering while the animal runs and swims.

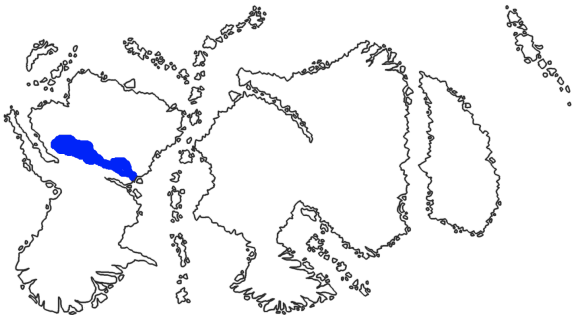
Diet: This animal feeds exclusively on aquatic plants. Its serrated beak allows it to grip and pull sections of plants free.

Shelter: Crested jawagora have almost entirely evolved their gills away - a strange development considering their habitat. They roost on branches and roots just above the level of the water. Taking a spot can involve some negotiation, with animals squawking, barging, and using their crests to gesture at one another, but full-on fights are unusual and most roosts will settle for the night without any incident.

Predators: An adult crested jawagora's only predators are apex predators. [I feel like I should add more here but the ecosystem needs more development before I can do that.]

Reproduction: This species' crest is used for courtship displays. While it is the male who initiates the display, if the female is interested she reciprocates. A litter is typically between 12 and 15, and the young are better swimmers than the adults. The mother plucks food from beneath the surface to feed them until they learn to dip under and find it themselves.

Range: This robust creature thrives in the River Eest and the surrounding wetlands, where its barbs and bristles make it difficult to tell apart from the foliage. Its crest makes it visible during mating season or when warning off a rival.



Predator Jawagora

Hunter Jawagora [Note: dissatisfied with name, may change later.]

Appearance: This species' location, the continent of Onar, has led to it developing a unique feature: forward-facing eyes. [I suspect its fins are also clawed, to aid it in catching and hunting prey.]

While this species has a beak, it also has noticeably long teeth and a very wide gape.

Two tall fins grace its head. [I'm not quite sure what these will be for yet, but since Onar's relatively cold I don't think they're for shedding heat.]

Diet: The predator jawagora is purely carnivorous. [I want to list some species here but I really don't know enough about Onar yet, just that it's got a lot of animals that are exotic even by Kaleida's standards - it's had time to evolve independently.]

Shelter: [Another unknown. I want to work out the geology of Onar better.]

Predators: [Ditto. I need to know what it's competing with and what's bigger/smaller than it.]

Reproduction: [Until I know more about the rest of its like, I'm going to have difficulty establishing how it raises the kids.]

Range: This is the only member of the jawagora Order to live on the continent of Onar.

Tailfin Jawagora

Silt Jawagora

Appearance: The only eyeless member of the jawagora Order, this species has a bare face, and large and well-developed nostrils.

It has notable quills on the back of its neck, which feel like bristles to the touch.

Its fins are noticeable. Both are used to improve its streamlining but the upper pair is the larger of the two, and these are excellent for helping the animal to keep cool.

Diet: The silt jawagora's diet is entirely made up of worms that it picks out of the riverside silt. Its sense of smell is excellent. Its beakless, flexible lips allow it to work efficiently through the mud.

Shelter: This species shelters from the desert sun during the middle of the day, under plants, rocks, and the burrows of other animals. If no other shelter is available it will dig a burrow, but its body is inefficient for this. Instead these creatures roll in wet silt to cover themselves in a protective layer of mud. The quills on the back of the animal's neck helps keep the mud in place.

Predators: The silt jawagora's hearing is arguably as good as its sense of smell. Despite its blindness, if it senses danger it will flee. Its fins can be effective in streamlining it to increase its speed. And it needs to be good at escaping predators: it is a small animal with many of them.

Reproduction: Burrows or other shelters that are exclusively their own become vital for breeding females, and because of this it is the females that hold territories and wait for passing, transient males. She gives birth to her litter, usually around six babies, in her shelter, and only leads them out into the open when the sun is not too hot. She pulls up worms for them to eat until they can find them, themselves. Competition between baby silt jawagoras is fierce, and it is usually the winners of the inevitable tug o' war battles with the worms given to them that determines who will survive to adulthood.

Range: This species lives in a small range within a portion of the Cranny River that runs through the desert and a nearby lake, where the ground is wet enough to create the silt that is so vital for these creatures.

Broadfin Jawagora

Appearance: The broadfin jawagora is the tailfin Family's answer to the True jawagora: it has large, broad fins which are its most noticeable feature.

It thrives in rivers where the current can carry it along, and uses its fins to steer.

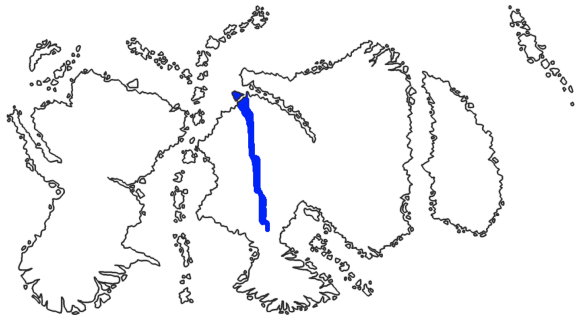
Its feathers are another of its noticeable features. In the males a short, dense ridge of iridescent blue feathers covers the dorsal part of the neck, and both species have thick, long feather strands on their bellies and tails. These are black with an iridescent sheen; the presence of melanin and the extra structural strength of the iridescence toughens them. They need this strength - the broadfin frequently grazes the river bed, which can be rocky and sharp in places, and the animal needs its feathers for protection.

Diet: The broadfin takes a combination of invertebrates and aquatic plants, which it snatches as it drifts along.

Shelter: The broadfin's biggest sheltering need is to get out of the rain. Even then its aquatic adaptations make this a relatively low priority. Despite this, it does appreciate time to dry off, to preen its feathers, and bask in the tropical warmth.

Predators: This animal is better adapted for fleeing danger on land than in the water, so often it will run. However, their predators have an advantage: the broadfin's feeding habits draw it down the river which eventually necessitates a journey back up-river, so its travel pattern is predictable. The broadfin's numbers make the toll on their population sustainable.

Reproduction: The iridescent blue of the male's neck-crest makes him shine, and he shows this off to best effect by dancing for the female to get her attention. If mating occurs then she will give birth to around a dozen babies. These imprint on her and follow her around until they become independent.



Range: This jawagora's range covers almost the whole length of the Cranny River, favouring the warmer section.

Medical Conditions

[Nothing written here yet.]

Geographical Distribution

Jawagora are ideally adapted for warm, wet climates. For this reason they are almost entirely found in or near water.

Position in Ecosystem

Most of this Order is frequently prey to predator species. Jawagora mostly eat seaweed or other aquatic plants, and some eat invertebrates. Only one species, the hunter jawagora, is carnivorous, and this one only takes small animals or eggs.

 History 

This is not a civilised species and I don't intend to turn Kaleida into an industrialised world, so the jawagora are unlikely to develop a history either as a civilisation or as a commercial product.

 Culture 

See History. No jawagora civilization means no culture.

Food

Most species of jawagora eat aquatic or semi-aquatic plants. Others eat small invertebrates, and one species eats small vertebrates and eggs.

[I don't yet have any plant or animal species I can specify that they feed on, so will add to this section another time.]

Language

While jawagora have no civilization, they are social creatures and have a few sounds and other signals that they use to communicate with one another.

[I will expand on these when I have developed them further.]

Social Dynamics

As social animals, jawagora are subject to observable patterns of social behaviour. [I'll add to these another time.]

 Politics 

As for Culture.

 Economy 

Jawagora do not have an economy in the strict sense, but as social animals they behave in certain, cohesive ways that are worthy of note here.

Money / Trading System

[I will return to this section another time to add detail about what jawagora value. Chances are it'll be food, shelter, warmth, and mating rights.]

Medicine

Jawagora do not retain knowledge of any medicinal benefits of the plants they eat. The nearest they have to medical knowledge is the UV-protection that silt jawagora benefit from by rolling in silt.

Construction

Jawagora can and do dig burrows. Depending on the species, sex, or other specifics, these can be anything from shallow scrapes to deep burrows. Some will happily use existing burrows dug by other species, and the jawagoras' combination of lungs and gills allow them to use underwater burrows.

[I'm thinking of including more detail here about the range of burrows the different species use.]

Credits

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Wording by The Character Consultancy

Want to upgrade to an Infographic or video, or expand your setting further? Email me and I will be happy to help you!

~ Hayley, Founder of The Character Consultancy

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