

**“ANIMAL SOCIETY”**  
Episode 03 “Birds”  
Final Timecoded Script

**SERIES INTRO:**

**001** 00:00:01:00 00:00:02:11  
Across our world, we live

**002** 00:00:04:08 00:00:05:06  
In cities

**003** 00:00:05:13 00:00:06:12  
And villages

**004** 00:00:08:04 00:00:10:00  
All part of a greater whole

**005** 00:00:11:03 00:00:12:12  
But we’re not alone

**006** 00:00:14:17 00:00:16:03  
They come in herds

**007** 00:00:17:23 00:00:18:19  
Hives

**008** 00:00:19:18 00:00:20:19  
And swarms

**009** 00:00:21:12 00:00:22:07  
Prides

**010** 00:00:22:18 00:00:23:07  
Packs

**011** 00:00:23:18 00:00:24:12  
And pairs

**012** 00:00:24:21 00:00:26:00  
Living in nature

**013** 00:00:26:12 00:00:28:06  
Members of society

**EPISODE INTRO:**

**014** 00:00:37:13 00:00:40:14

Across the blue skies, or in the dark waters

**015** 00:00:40:24 00:00:42:17

In forests and swamps

**016** 00:00:42:22 00:00:45:03

Or in deserts and amid arid rocks

**017** 00:00:45:18 00:00:48:12

Birds have colonized every inch of our planet

**018** 00:00:48:14 00:00:50:07

From the hottest tropical jungle

**019** 00:00:50:13 00:00:52:06

To the barren Antarctica

**020** 00:00:52:17 00:00:57:11

With 10 000 species, few animal groups are as prolific or as varied

**021** 00:00:57:22 00:01:00:00

Coming in all shapes and sizes

**022** 00:01:00:08 00:01:01:23

From the largest, the ostrich

**023** 00:01:02:18 00:01:04:14

Weighing over 300 pounds

**024** 00:01:04:24 00:01:10:05

To the smallest, the Bee Hummingbird of Cuba, weighing just over a twentieth of an ounce

**025** 00:01:10:14 00:01:13:08

Each have adapted to their environment and lifestyle

**026** 00:01:14:00 00:01:15:04

Soaring and gliding

**027** 00:01:15:13 00:01:16:24

To diving and hovering

**028** 00:01:17:15 00:01:20:04

With many even lacking the ability to fly

**SEGMENT 1:**

**029** 00:01:21:02 00:01:22:10

Such as the penguin

**030** 00:01:24:03 00:01:31:02

Existing almost exclusively in the Southern Hemisphere, penguins live mainly in temperate, subpolar or polar climates

**031** 00:01:32:18 00:01:36:04

Few birds have become so uniquely adapted to their environment

**032** 00:01:36:13 00:01:39:09

And so far removed from other birds in appearance

**033** 00:01:41:00 00:01:49:17

Standing upright with stout body and an unmistakable black and white color pattern, and their small vestigial wings have evolved to dense flippers

**034** 00:01:53:10 00:01:55:15

They are fish eaters and fast swimmers

**035** 00:01:56:03 00:01:58:03

Spending most of their lives in the water

**036** 00:02:01:09 00:02:05:06

Most feeding on krill, fish, squid and crustaceans

**037** 00:02:06:02 00:02:10:21

They are also among the few animals that have not only survived the harsh cold of Antarctica

**038** 00:02:11:06 00:02:15:09

But thrived in a hostile environment devoid of predators and competition

**039** 00:02:18:19 00:02:23:05

Penguins are made up of 19 living species, over 6 different genus

**040** 00:02:23:18 00:02:32:16

Including the great penguins, the brush-tailed penguins, little penguins, banded penguins, yellow-eyed penguins and crested penguins

**041** 00:02:33:21 00:02:39:13

They range in size from the emperor penguin standing at over 3 feet tall, weighing nearly 80 pounds

**042** 00:02:39:20 00:02:44:08

To the little blue penguin at a mere 16 inches, at just over 2 pounds

**043** 00:02:45:01 00:02:49:17

Larger species generally found further south in polar or subpolar climates

**044** 00:02:50:03 00:02:54:17

While smaller penguins have generally adapted to temperate or even tropical climates

**045** 00:02:57:24 00:03:04:12

Their thick smooth plumage trapping air not only to keep the penguin warm but to preserve buoyancy under water

**046** 00:03:06:22 00:03:12:03

Most penguins hunting in small groups of anywhere between 3 or 4 to a dozen individuals

**047** 00:03:13:08 00:03:18:16

Using collaborative hunting to attack schools of fish or krill from multiple directions

**048** 00:03:20:04 00:03:27:24

While during mating and breeding season, penguins gather in huge colonies on land, known as rookeries, farther inland than their hunting grounds

**049** 00:03:29:07 00:03:36:15

From a hundred or so, as for Gentoo penguins, to hundreds of thousands as with king, macaroni and chinstrap penguins

**050** 00:03:39:03 00:03:44:08

The only exception being the yellow-eyed and Fiordland species, who breed in individual pairs

**051** 00:03:45:19 00:03:50:17

As a result, penguins have developed a wide array of calls and non-verbal communications

**052** 00:03:51:16 00:03:56:07

Different vocalizations and postures as well as flapping of their wings having differing meanings

**053** 00:03:58:18 00:04:01:13

Used either as welcoming greetings and acknowledgements

**054** 00:04:02:22 00:04:06:09

Or antagonistic displays to ward off unwanted individuals

**055** 00:04:06:17 00:04:08:00

Or to avoid conflict

**056** 00:04:08:22 00:04:12:00

The penguin calls themselves are divided into three categories

**057** 00:04:12:03 00:04:13:20

The loudest, the contact call

**058** 00:04:15:13 00:04:18:07

Being used to identify and greet colony members

**059** 00:04:18:24 00:04:21:20

Which can be heard nearly a mile away with larger species

**060** 00:04:22:09 00:04:24:04

The most complex, the display call

**061** 00:04:25:20 00:04:29:20

Used to convey territorial, sexual and individual recognition information

**062** 00:04:30:06 00:04:32:03

Unique to each individual penguin

**063** 00:04:33:12 00:04:37:02

Allowing mates and parent and chick to recognize each other by sound

**064** 00:04:38:22 00:04:41:18

The last being the threat call, the simplest of them all

**065** 00:04:42:20 00:04:44:21

Used to defend the penguin's territory

**066** 00:04:45:20 00:04:48:05

Or to call attention to a nearby predator

**067** 00:04:49:15 00:04:54:21

Mating season takes place every 12 to 16 months, usually coinciding with the oncoming summer

**068** 00:04:55:02 00:05:01:15

When the penguin rookeries return to the same area, year after year, to mate, lay eggs and care for their young

**069** 00:05:04:16 00:05:12:02

The emperor penguin being the exception, breeding only during the Antarctic winter, though the location of their rookeries also remain the same

**070** 00:05:13:21 00:05:17:14

All penguins are generally monogamous, only rarely changing partners

**071** 00:05:17:24 00:05:21:11

And then only if their mate from the previous mating season fails to return

**072** 00:05:21:24 00:05:35:19

Males arrive first, establishing a nest area and often fasting to focus their entire attention on the preparation of the nest site, which can vary considerably between species, from deep in forested areas to rocky shores and ice shelves

**073** 00:05:37:06 00:05:41:12

Though most nests are generally constructed in the same way using stones or twigs

**074** 00:05:41:23 00:05:46:18

The males gathering each piece one by one over several hours, sometimes days

**075** 00:05:47:01 00:05:50:12

As the stability of the nest is crucial in the courtship of the females

**076** 00:05:50:23 00:05:56:11

All penguins have an elaborate courtship routine, starting with the ecstatic display, or trumpeting

**077** 00:05:57:12 00:06:00:04

Where the male calls out with loud braying noises

**078** 00:06:00:11 00:06:02:24

To indicate that his nest has been established

**079** 00:06:03:20 00:06:07:13

Thus also warning other males to stay away as a territorial display

**080** 00:06:10:15 00:06:20:19

When the female arrives, they then engage in the mutual ecstatic, wherein the female reciprocates the ecstatic display as a show of interest, establishing or reestablishing a pair bond

**081** 00:06:22:16 00:06:28:10

The mutual ecstatic is consistently repeated throughout egg incubation and the caring of their young

**082** 00:06:32:00 00:06:38:11

The last stage is bowing, where the penguin lowers its heads toward its mate, followed by a low growl or hiss

**083** 00:06:39:24 00:06:44:06

Used to strengthen recognition between partners as well as resolve any conflict

**084** 00:06:44:24 00:06:47:18

The mate then reciprocates to initiate mating

**085** 00:06:49:07 00:06:52:07

The mating act is brief and repeated over the course of a day

**086** 00:06:54:24 00:06:58:16

The female then lays one or two eggs to incubate within the nest

**087** 00:07:02:09 00:07:11:11

With only the emperor and king penguins always keeping a single egg on top of their feet, under a loose fold or brood patch in their lower abdomen to keep warm for incubation

**088** 00:07:14:21 00:07:20:12

Both partners typically alternate in incubating the eggs, the other searching for food to bring back to their mate

**089** 00:07:27:00 00:07:30:11

After hatching, the chicks are similarly cared for by both parents

**090** 00:07:30:21 00:07:36:13

One always staying with the chick while the other brings back food to regurgitate into the mouth of the chick and its mate

**091** 00:07:41:03 00:07:45:14

The chicks are born either naked or with a thin brown, grey or white plumage

**092** 00:07:46:02 00:07:50:23

Prohibiting the chick from swimming as it lacks the insulating effect of the final plumage

**093** 00:07:51:08 00:07:57:06

Molting only after the chick reaches adolescence, between 2 months to over a year old, depending on the species

**094** 00:07:59:20 00:08:08:22

Mortality rates being between 40 to 90% for most chicks during their first year, often targeted by predators such as orcas, seals, sea lions and sharks

**095** 00:08:09:09 00:08:13:09

With all penguins taking an additional 2 to 7 years to reach maturity

**096** 00:08:13:16 00:08:19:08

As most penguins are comparatively long lived, lifespans often reaching 15 to 20 years old

**SEGMENT 02:**

**097** 00:08:31:05 00:08:33:05

Soaring high above the stormy seas

**098** 00:08:33:18 00:08:35:05

We find the albatross

**099** 00:08:36:24 00:08:39:19

One of the most recognizable seabirds in the world

**100** 00:08:40:20 00:08:46:00

They are the mighty gliders, travelling for over 600 miles on a single flap of their wings

**101** 00:08:46:10 00:08:50:07

Able to lock their wing in place to keep it fully extended without strain

**102** 00:08:52:00 00:08:55:01

Albatrosses are also among the largest birds in existence

**103** 00:08:55:18 00:08:59:20

The largest, the wandering albatross, having a wingspan of up to 12 feet

**104** 00:09:00:23 00:09:04:24

Though their bodies are considerably smaller than other birds of equivalent wingspans

**105** 00:09:05:15 00:09:09:21

The smallest, the sooty albatross, weighing as little as 5 to 6 pounds

**106** 00:09:10:05 00:09:13:23

They are divided into 22 species, over 4 genera

**107** 00:09:14:02 00:09:15:09

The great albatrosses

**108** 00:09:15:17 00:09:16:15

The mollymawks

**109** 00:09:17:00 00:09:18:19

The North Pacific albatrosses

**110** 00:09:19:15 00:09:21:02

And the sooty albatrosses

**111** 00:09:21:17 00:09:26:00

Closely related to petrels as part of the same order of so called tubenoses

**112** 00:09:26:11 00:09:32:08

They are found throughout temperate and subpolar areas of the Pacific, South Atlantic and Indian Ocean

**113** 00:09:32:12 00:09:35:17

Depending on the stronger Northern or Southern winds for soaring

**114** 00:09:36:01 00:09:40:14

Only the waved albatross being found in the tropical regions of Pacific South America

**115** 00:09:41:13 00:09:44:24

Albatrosses are all identifiable by their long wingspans

**116** 00:09:45:01 00:09:49:03

Long, sharp bills made up of horny plates ending with a large hook

**117** 00:09:49:04 00:09:50:15

Strong, webbed feet

**118** 00:09:50:17 00:09:53:19

And the elongated nostrils that gave the order its name

**119** 00:09:54:02 00:09:58:08

Allowing them to measure the exact airspeed in flight to enable dynamic soaring

**120** 00:09:58:24 00:10:03:18

Rising into the wind and descending downwind to gain energy from the vertical wind gradient

**121** 00:10:04:07 00:10:07:14

Only rarely flapping their wings, usually to take flight

**122** 00:10:07:24 00:10:11:06

Though they typically need to face into the wind while running to take off

**123** 00:10:11:11 00:10:12:23

Or by jumping off from a cliff

**124** 00:10:14:03 00:10:17:23

They all exhibit some variation of white and black or brown coloration

**125** 00:10:18:05 00:10:20:02

Most being predominantly white

**126** 00:10:20:23 00:10:24:11

Which has led to the common confusion with the unrelated seagull

**127** 00:10:25:00 00:10:29:08

Albatrosses depend mainly on their sense of smell for hunting as well as eyesight

**128** 00:10:30:00 00:10:33:13

Their diet consisting mostly of squid, fish and crustaceans

**129** 00:10:34:19 00:10:40:04

Either sitting on the surface of the water to snap up passing prey that have been forced up by the currents

**130** 00:10:40:23 00:10:43:16

Or, occasionally, by plunge diving from the air

**131** 00:10:45:04 00:10:51:14

They maintain a largely solitary lifestyle, foraging alone across huge distances between breeding seasons

**132** 00:10:52:02 00:10:59:22

With no migratory season or fixed ranges and no territories to speak of, many species circling the globe repeatedly through their life

**133** 00:11:00:22 00:11:07:06

As such, communication between albatrosses is limited with most albatrosses remaining silent while out at sea

**134** 00:11:07:20 00:11:15:04

Only occurring during occasional accidental interactions, as when food is abundant, drawing several albatrosses to a single location

**135** 00:11:15:20 00:11:19:16

Or during mating season, occurring once a year, usually in the early spring

**136** 00:11:19:20 00:11:23:12

The variety of vocalizations employed by the albatross being for display purposes

**137** 00:11:24:01 00:11:24:13

Whining

**138** 00:11:25:02 00:11:25:18

Squeaking

**139** 00:11:26:10 00:11:27:12

And moaning calls

**140** 00:11:31:18 00:11:35:02

Only occasionally braying in longer notes and snapping their bills to show aggression

**141** 00:11:37:01 00:11:39:16

Like other seabirds, albatrosses are colonial

**142** 00:11:39:22 00:11:44:12

Though unlike most, they gather on isolated islands and exposed headlands

**143** 00:11:44:21 00:11:48:06

Usually returning to the same nesting grounds year after year

**144** 00:11:48:21 00:11:50:13

The same one they were born in

**145** 00:11:50:23 00:11:54:07

Generally in the Antarctic tundra or the Subantarctic islands

**146** 00:11:55:20 00:12:00:04

Northern Pacific species breeding along the northern coasts of Asia and North America

**147** 00:12:01:14 00:12:09:04

Remotely located and often free from terrestrial land predators, the colonies may vary from dense groupings of hundreds, as with mollymawks

**148** 00:12:10:18 00:12:15:24

To looser groups and widely spaced individual nests, as with great and sooty albatrosses

**149** 00:12:16:21 00:12:20:24

Albatrosses are widely known for their elaborate and highly specific courtship rituals

**150** 00:12:22:19 00:12:31:03

Including synchronized performances of various actions such as preening, calling, pointing, bill clacking, staring and dancing

**151** 00:12:32:20 00:12:34:07

Often involving sky calling

**152** 00:12:34:16 00:12:37:09

Where the male puts on a display by vocalizing upward

**153** 00:12:37:18 00:12:39:02

And spreading out its wings

**154** 00:12:41:03 00:12:46:18

First timers dancing with many partners for several consecutive seasons until it finds its final mate

**155** 00:12:47:06 00:12:52:11

After which, they continue to perfect their ritual until it has become entirely unique to that pair

**156** 00:12:53:13 00:12:54:12

And they mate

**157** 00:12:55:24 00:12:58:15

Establishing a pair bond that will last for a lifetime

**158** 00:12:58:21 00:13:00:24

Meeting only every 2-3 years

**159** 00:13:01:03 00:13:03:12

At the same spot to mate again

**160** 00:13:03:20 00:13:08:07

The female lays a single large egg in a large nest of grass, shrubs and soil

**161** 00:13:08:17 00:13:10:02

Either set on flat land

**162** 00:13:10:07 00:13:11:14

At the base of a tree

**163** 00:13:11:19 00:13:12:21

Or on a cliff side

**164** 00:13:14:11 00:13:17:06

Only the waved albatross lacking a nest altogether

**165** 00:13:17:21 00:13:20:05

Instead moving their egg continuously around

**166** 00:13:22:11 00:13:27:01

After which the parents alternate in incubating the egg for the next 70 to 80 days

**167** 00:13:28:04 00:13:30:09

The longest incubation period for any bird

**168** 00:13:31:00 00:13:35:22

Each of the parents incubating the egg for up to 3 weeks at a time, alternating foraging trips

**169** 00:13:37:01 00:13:41:07

Once it's ready, the chick emerges from the egg covered in a light juvenile plumage

**170** 00:13:41:11 00:13:42:24

Either grey or brown

**171** 00:13:43:12 00:13:46:08

After which it remains guarded and brooded for 3 weeks

**172** 00:13:48:08 00:13:52:03

Cared for by both parents alternating bringing home food at a regular interval

**173** 00:13:52:19 00:13:55:17

Feeding it a mixture of squid and fish as well as stomach oil

**174** 00:13:56:06 00:14:02:04

A highly nutritious fluid generated inside the stomach of an adult albatross from previously digested food

**175** 00:14:03:07 00:14:08:21

Slowly gaining weight over several months until the chick becomes heavier than its parents in preparation for fledging

**176** 00:14:08:23 00:14:12:19

When the chick develops its new plumage with feathers strong enough to support flight

**177** 00:14:13:08 00:14:16:06

Taking on average 5 to 6 months for most albatrosses

**178** 00:14:17:19 00:14:20:21

With the greater albatrosses taking as long as 10 months

**179** 00:14:21:21 00:14:25:02

The chick taking flight and not returning until it's ready to mate

**180** 00:14:25:11 00:14:27:23

Leaving its parents behind to disperse on their own

**181** 00:14:28:23 00:14:32:17

The juvenile albatross reaches maturity at only 5 years of age

**182** 00:14:33:03 00:14:36:05

But even then they will not attempt to breed for another few years

**183** 00:14:37:01 00:14:42:11

Instead visiting colonies during mating season to practice the elaborate breeding rituals and dances

**184** 00:14:44:17 00:14:48:19

The mortality rate for albatrosses is high, particularly with the smaller species

**185** 00:14:50:10 00:14:52:18

Targeted by aquatic predators when swimming

**186** 00:14:53:09 00:14:55:23

And feral cats and rats while on land

**187** 00:14:56:19 00:15:01:08

Tiger sharks particularly targeting young chicks as they attempt to fly for the first time

**188** 00:15:01:17 00:15:04:07

Often found waiting near breeding sites every year

**189** 00:15:06:10 00:15:10:11

As the albatross gets older, however, the mortality rate gradually drops

**190** 00:15:11:15 00:15:15:21

As it learns to hunt more effectively and spends less time on the water's surface and on land

**191** 00:15:17:05 00:15:21:06

Albatrosses also have a far greater lifespan than most other birds in existence

**192** 00:15:22:12 00:15:24:18

Up to 60 years of age in the wild

**193** 00:15:25:23 00:15:27:15

Still actively nesting

**SEGMENT 03:**

**194** 00:15:41:16 00:15:44:22

Among the most iconic birds today are the eagles

**195** 00:15:45:09 00:15:48:12

A loosely held together group of large birds of prey

**196** 00:15:48:21 00:15:52:00

They are closely related to hawks, kites and harriers

**197** 00:15:54:19 00:15:58:17

60 species in all, known for being among the largest raptors in the world

**198** 00:15:59:11 00:16:00:18

Aside from vultures

**199** 00:16:03:24 00:16:11:00

Active hunters and apex predators, they are known to hunt snakes and lizards, small or medium-sized mammals or even other birds

**200** 00:16:14:03 00:16:17:24

The largest eagles even known to attack deer, wolves and foxes

**201** 00:16:19:24 00:16:24:13

With most eagles having no natural predators and residing firmly on the top of the food chain

**202** 00:16:26:22 00:16:30:01

Eagles are widely known for their distinctive iconic appearance

**203** 00:16:31:09 00:16:33:14

With unusually large, hooked beaks

**204** 00:16:33:23 00:16:35:02

Large heavy heads

**205** 00:16:35:13 00:16:36:14

Robust builds

**206** 00:16:36:22 00:16:38:06

Strong muscular legs

**207** 00:16:38:17 00:16:43:02

And large powerful talons, used to grab hold and tear flesh from their prey

**208** 00:16:44:19 00:16:49:10

As well as their keen eyesight, which can be over 3 times the acuity of human eyes

**209** 00:16:50:05 00:16:54:02

With the additional ability of seeing well beyond the normal color spectrum

**210** 00:16:55:16 00:17:00:22

To enable the eagle, often soaring high above fields and forests, to spot smaller prey down below

**211** 00:17:01:10 00:17:04:08

Prey which may often be camouflaged or concealed

**212** 00:17:04:12 00:17:08:02

Some able to spot a rabbit partially hidden up to 2 miles away

**213** 00:17:08:24 00:17:13:01

Though they are all frequently highly opportunistic, occasionally taking carrion

**214** 00:17:14:20 00:17:17:14

They can be found on every continent except Antarctica

**215** 00:17:18:15 00:17:21:04

Most being concentrated in Africa and Eurasia

**216** 00:17:23:01 00:17:25:00

With the habitats of many eagles overlapping

**217** 00:17:25:12 00:17:29:06

Though they have each developed specializations of both prey and environment

**218** 00:17:29:16 00:17:32:02

So as not to directly be in competition with each other

**219** 00:17:34:03 00:17:35:24

Typically divided into 4 groups

**220** 00:17:36:19 00:17:41:15

Fish eagles, snake eagles, harpy eagles and booted or true eagles

**221** 00:17:42:08 00:17:44:11

Eagles are typically highly solitary

**222** 00:17:44:14 00:17:50:00

Often seen alone or in pairs in desolate or distant areas, far from human settlements

**223** 00:17:50:18 00:17:54:15

Only rarely coming together in smaller groups for seasonal migration

**224** 00:17:55:09 00:17:57:21

Though many species are primarily sedentary

**225** 00:17:58:01 00:18:03:04

Some eagles in temperate or subpolar climates employ highly complex migratory patterns

**226** 00:18:04:02 00:18:07:07

Though even then commonly only gathering as juveniles

**227** 00:18:08:09 00:18:11:13

With adults remaining either solitary or in pairs

**228** 00:18:12:05 00:18:16:13

As such, eagles generally have 1 or 2 primary foraging ranges

**229** 00:18:16:18 00:18:19:04

Which can be as large as 100 square miles

**230** 00:18:19:12 00:18:21:17

Only a few species being nomadic

**231** 00:18:23:18 00:18:26:03

Eagles have also been known to be highly territorial

**232** 00:18:26:16 00:18:30:03

Utilizing aerial displays, aggressive direct flapping flight

**233** 00:18:30:18 00:18:33:10

And even dogfights to push other individuals out

**234** 00:18:34:13 00:18:39:09

Dogfights which can occasionally be fatal, given the size and strength of the eagle

**235** 00:18:40:02 00:18:44:23

Communication between eagles is frequently limited to a few distinctive calls and whistles

**236** 00:18:45:03 00:18:48:16

Though they may be of great complexity and vary depending on location

**237** 00:18:49:00 00:18:51:04

Forming dialects within a single species

**238** 00:18:52:20 00:18:59:11

They can vary between almost entirely silent until threatened to highly vocal with great variations in song between species

**239** 00:19:00:05 00:19:05:04

Divided between simpler threat calls, high-pitched cries or honking used when threatened

**240** 00:19:06:01 00:19:13:21

And more complex display calls with repeated phrases, used to attract mates, often used by the female to signal her readiness

**241** 00:19:14:16 00:19:21:16

As well as the single-note cheeping call of their young, which develops as the chick grows older into full adult calls

**242** 00:19:21:22 00:19:28:13

Though the calls are often extremely high pitched and can carry for miles, due to the often vast distances between individuals

**243** 00:19:29:21 00:19:37:18

Mating season occurs every 1 to 2 years, lasts 2 to 3 months, the time of which may vary greatly depending on the climate and species

**244** 00:19:38:22 00:19:45:02

First time males actively seeking out females of nearby territories, forming a joint territory from then on

**245** 00:19:45:09 00:19:50:10

With nearly all species of eagle known to form monogamous pairs after their first mating season

**246** 00:19:51:17 00:19:54:06

Staying together until one of the party dies

**247** 00:19:54:24 00:19:57:13

Though a replacement may be found soon thereafter

**248** 00:19:58:03 00:20:04:01

Their calls are instantly recognizable to their mate, who immediately moves to seek out the source, no matter how far

**249** 00:20:05:02 00:20:10:12

The male then engages in a variety of display flights, alternating soaring and complex maneuvers

**250** 00:20:11:23 00:20:15:15

Diving, gliding and chasing each other while calling loudly in courtship

**251** 00:20:15:23 00:20:18:22

Even using stones and sticks as part of the display

**252** 00:20:19:05 00:20:21:08

Dropping and catching it to impress their mate

**253** 00:20:21:20 00:20:23:21

The typically much larger female

**254** 00:20:26:18 00:20:30:09

Before they settle down and prepare a nest site, or eyrie, together

**255** 00:20:31:00 00:20:37:22

Gathering sticks and leaves to build a large bowl-shaped or flat nest, between 30 to 100 inches wide

**256** 00:20:38:15 00:20:45:14

Set on high cliffs and mountainsides or high up in the tree tops, larger eagles often using the same location every year

**257** 00:20:45:18 00:20:51:05

Leading to some nest sites gradually increasing in size as they are rebuilt every mating season

**258** 00:20:51:09 00:20:56:21

While many smaller eagles re-appropriate the nests of other birds, including crows and sea birds

**259** 00:20:57:15 00:21:01:15

Mating is typically brief and repeated over several weeks to ensure conception

**260** 00:21:02:12 00:21:07:18

About 6 weeks later, the female lays 2 to 4 eggs which are then cared for by both parents

**261** 00:21:08:07 00:21:11:15

Typically alternating incubation of the eggs for 1 to 2 months

**262** 00:21:13:00 00:21:17:23

The chicks hatch small and defenseless, covered in a light brown, white or grey down

**263** 00:21:19:02 00:21:23:09

With the male bringing food initially while the female watches over the chicks

**264** 00:21:24:19 00:21:29:01

Though they soon begin to alternate as the chicks grow stronger and more independent

**265** 00:21:30:14 00:21:33:02

The parent hunting for both their mate and their young

**266** 00:21:34:08 00:21:36:14

Regurgitating food into their mouths

**267** 00:21:37:08 00:21:45:16

With some species, such as the bald eagle, the larger chick additionally frequently kills the younger one once it's hatched to eliminate competition for food

**268** 00:21:46:10 00:21:48:20

And sometimes to partake in cannibalism

**269** 00:21:50:10 00:21:52:24

While the parents observe without intervening

**270** 00:21:53:22 00:21:57:12

The eagle chicks first attempt to fly within 2 to 3 months

**271** 00:21:57:17 00:22:01:04

Depending on their parents for food up to 6 months after hatching

**272** 00:22:01:12 00:22:06:14

The chick soon thereafter leaving the nest permanently, coinciding with the following mating season

**273** 00:22:06:17 00:22:10:16

With larger harpy eagles taking significantly longer, up to 11 months

**274** 00:22:11:03 00:22:19:11

Immature eagles are typically dispersive, moving tens, if not hundreds of miles away from their birthplace and retaining no connection to their parents

**275** 00:22:20:03 00:22:24:20

Only reaching maturity and establishing a fixed territory at 2 to 5 years of age

**276** 00:22:24:22 00:22:27:15

At which point they also attain their final plumage

**277** 00:22:28:01 00:22:33:04

Though many young eagles fail to find a mate for the first 1 to 2 years after maturation

**278** 00:22:34:16 00:22:40:00

Most eagles have relatively long life spans, some believed to last well past 30 years in the wild

**OUTRO:**

**279** 00:22:41:08 00:22:43:14

Just as with the penguins and the albatrosses

**280** 00:22:44:01 00:22:47:11

The eagles form an integral part of their surrounding ecosystem

**281** 00:22:48:18 00:22:51:10

With all forms of social configurations

**282** 00:22:53:02 00:22:54:15

From massive rookeries

**283** 00:22:54:19 00:22:56:11

To medium sized colonies

**284** 00:22:56:17 00:22:58:05

To loners and pairs

**285** 00:22:59:00 00:23:01:22

They can exhibit both complex calls and dances

**286** 00:23:02:20 00:23:05:13

Intricate flights and silent understandings

**287** 00:23:06:24 00:23:09:10

They are no less interesting either as groups

**288** 00:23:10:01 00:23:11:00

Or individuals

**289** 00:23:12:17 00:23:15:05

All part of the animal society

**METRICS:**

**023** 00:01:02:18 00:01:04:14

Weighing up to 120 kilograms

**024** 00:01:04:24 00:01:10:05

To the smallest, the Bee Hummingbird of Cuba, weighing a mere 1.6 grams

**041** 00:02:33:21 00:02:39:13

They range in size from the emperor penguin standing at 130 centimeters tall, weighing 23 kilograms

**042** 00:02:39:20 00:02:44:08

To the little blue penguin at a mere 30 centimeters, at 1.5 kilograms

**100** 00:08:40:20 00:08:46:00

They are the mighty gliders, travelling for over 1000 kilometers on a single flap of their wings

**103** 00:08:55:18 00:08:59:20

The largest, the wandering albatross, having a wingspan of up to 3.7 meters

**105** 00:09:05:15 00:09:09:21

The smallest, the sooty albatross, weighing as little as 2 kilograms

**212** 00:17:04:12 00:17:08:02

Some able to spot a rabbit partially hidden up to 3 kilometers away

**229** 00:18:16:18 00:18:19:04

Which can be as large as 300 square kilometers

**255** 00:20:31:00 00:20:37:22

Gathering sticks and leaves to build a large bowl-shaped or flat nest, between 75 to 250 centimeters wide