

“ANIMAL SOCIETY”
Episode 12 “Rodents”
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 00:00:37:16 00:00:39:01

Everywhere on earth

015 00:00:39:13 00:00:41:01

Rodents exist

016 00:00:41:13 00:00:45:00

Making up over 40% of all mammal species

017 00:00:45:13 00:00:49:24

They've learned to adapt to nearly any environment, under any circumstances

018 00:00:50:08 00:00:53:20

From jungles and forests to snowy mountains and deserts

019 00:00:53:24 00:00:55:21

Even human habitats

020 00:00:56:05 00:01:02:20

They are immediately recognizable for their sharp incisors, existing in pairs on both their upper and lower jaw

021 00:01:03:04 00:01:07:04

Most being small, robust animals with short limbs and long tails

022 00:01:07:12 00:01:13:10

The smallest, the pygmy gerboa, being less than 2 inches long, weighing a tenth of an ounce

023 00:01:13:22 00:01:20:00

The largest, the capybara, being over 4 feet long and weighing up to 200 pounds

SEGMENT 01:

024 00:01:20:19 00:01:23:14

The most common of all rodents are the muroids

025 00:01:23:24 00:01:26:00

A diverse group of rodents

026 00:01:26:04 00:01:32:23

With over 1300 species, across 6 families, 19 subfamilies and 280 genera

027 00:01:33:04 00:01:36:11

They are also the largest single group of interrelated mammals

028 00:01:36:19 00:01:44:20

Including both new and old world mice and rats as well as gerbils, muskrats, mole rats, hamsters, voles and lemmings

029 00:01:46:21 00:01:49:20

They can be found on every continent except Antarctica

030 00:01:50:02 00:01:52:08

Deep in jungles and forests everywhere

031 00:01:52:17 00:01:57:11

As well as more open rural and urban areas and windswept deserts

032 00:01:57:24 00:02:03:20

Generally being active year-round, often seeking warmth in human housing in colder climates

033 00:02:04:10 00:02:08:15

Most being exclusively terrestrial while a few may be semi-aquatic

034 00:02:10:15 00:02:14:16

All being small, short-limbed rodents distinguished for their adaptability

035 00:02:15:01 00:02:21:04

Often omnivorous and opportunistic diet, pointed head, sensitive whiskers and quick speed

036 00:02:21:22 00:02:26:15

They range in size between a mere 2 inches long, as with some species of hamster

037 00:02:27:02 00:02:31:15

To up to 2 feet long, weighing 4 to 5 pounds, as with many muskrats

038 00:02:33:04 00:02:36:10

Most muroids are either nocturnal or crepuscular

039 00:02:36:15 00:02:40:08

Foraging for food under the cover of darkness to avoid predation

040 00:02:41:11 00:02:46:00

Primarily resting during the day, though limited activity still remains common

041 00:02:47:13 00:02:51:21

Their diet ranging from seeds, fruit, leaves, shoots and roots

042 00:02:53:00 00:02:56:15

To insects and other invertebrates, as well as carrion

043 00:02:57:09 00:03:00:24

A few larger species targeting other smaller mammals as well

044 00:03:01:11 00:03:04:17

Their main sensory input being that of their sense of smell

045 00:03:05:01 00:03:13:17

Their often enlarged snout containing thousands of smell receptors allowing the muroid to detect the faintest chemical signatures at great distances

046 00:03:13:24 00:03:18:19

Able to locate potential food sources from hundreds of yards away with some species

047 00:03:19:01 00:03:25:16

While their sense of eyesight may vary greatly from acute to very poor, depending largely on their environment and lifestyle

048 00:03:26:06 00:03:31:03

Most relying mainly on their keen sense of hearing as well for predator and threat detection

049 00:03:31:14 00:03:41:13

Many having significantly well-developed hearing with large rounded outer ears capable of detecting the exact direction and distance of sounds well beyond the range of human hearing

050 00:03:42:03 00:03:49:21

While in nature, most murids take shelter in cup-like nests inside crevices and burrows, such as tree hollows or termite mounds

051 00:03:50:14 00:03:53:20

Many have adapted significantly to human habitations as well

052 00:03:54:01 00:03:59:11

Hiding behind or under heavy furniture as well as in crawlspaces and cracks in the walls

053 00:04:00:01 00:04:06:11

Some, such as the mole rats, being burrowing rodents, though unrelated to true moles and naked mole rats

054 00:04:06:14 00:04:09:24

They live in intricately designed tunnel systems underground

055 00:04:10:04 00:04:11:24

Dug out using their incisors

056 00:04:12:10 00:04:17:04

Only rarely coming up above ground with many species being completely blind

057 00:04:17:14 00:04:22:11

Most muroids have fixed permanent or transient territories and foraging grounds

058 00:04:22:20 00:04:25:20

Often centered around a consistent source of food

059 00:04:26:00 00:04:32:12

Generally being solitary, they may easily become territorial and defensive toward unrelated individuals

060 00:04:33:11 00:04:37:11

Hissing or attacking any newcomers encroaching on their territory

061 00:04:38:04 00:04:43:00

Most instead forming either monogamous long-term pairs or larger family groups

062 00:04:43:04 00:04:51:22

Hamsters being particularly aggressive toward unrelated individuals while rats are outwardly more prosocial and inclined to share food sources

063 00:04:52:13 00:05:00:13

Many muroids are highly vocal as a result, using a variety of crude vocalizations for communication due to their highly developed hearing

064 00:05:00:18 00:05:06:07

Usually various squeaks in repeating patterns to signal their location and to identify themselves

065 00:05:06:19 00:05:12:11

Many utilizing sounds in the ultrasonic range as well to increase audibility over great distances

066 00:05:12:16 00:05:19:00

With some species producing more complex vocal patterns such as songs to attract mates during mating season

067 00:05:19:03 00:05:25:14

As well as using scent markings with designated scent glands and urine markings to delineate their territory

068 00:05:26:06 00:05:36:03

Muroids being generally intelligent for their relative size, exhibiting learning behavior as well as basic problem solving and advanced navigation techniques based on scents alone

069 00:05:36:08 00:05:41:04

Mating season may occur year-round for many species with multiple litters each year

070 00:05:41:16 00:05:45:17

Some, such as hamsters, entering estrus every 4 days

071 00:05:45:22 00:05:55:03

Emitting powerful pheromones to signal her readiness, with peak reproductive activity being around summer to late fall for most, when food is abundant

072 00:05:55:07 00:06:01:17

The male typically initiating mating by seeking out a female and exhibiting some form of simplified courtship

073 00:06:01:24 00:06:03:18

Often being simple greetings

074 00:06:04:02 00:06:06:14

Mutual sniffing and limited vocalizations

075 00:06:07:05 00:06:09:09

Mating is often quick and repeated

076 00:06:09:22 00:06:16:05

After which, the male may either remain in a monogamous pairing, as with most hamsters, gerbils and muskrats

077 00:06:16:12 00:06:20:22

Or, as with many rats, the male leaves to seek out food or a new mate

078 00:06:21:06 00:06:25:01

Leaving the female to give birth and take care of their young by herself

079 00:06:25:14 00:06:29:23

Gestation periods are typically short, only a couple of weeks for some species

080 00:06:30:09 00:06:35:23

The female then gives birth in a secluded nest to a litter of anywhere between 2 to 25 young

081 00:06:36:19 00:06:43:02

Most muroid young are born naked and helpless, weighing as little as a hundredth of an ounce for smaller species

082 00:06:44:00 00:06:46:14

They depend entirely on their mother for survival

083 00:06:46:20 00:06:50:20

Though the mother may occasionally prioritize her own safety over that of her litter

084 00:06:51:11 00:06:57:13

Many species noted for eating their young when threatened, recuperating energy in case of a sudden need for escape

085 00:06:58:17 00:07:02:19

Muroid young development continues rapidly over the first few days and weeks

086 00:07:03:00 00:07:06:21

Often opening their eyes within the first 2 to 3 days for most species

087 00:07:07:00 00:07:10:05

Weaning at anywhere between 1 week to 2 months

088 00:07:10:13 00:07:15:04

Many permanently leaving the nest and reaching mature size at only 1 to 2 months of age

089 00:07:15:16 00:07:18:02

Becoming sexually mature shortly thereafter

090 00:07:18:07 00:07:21:04

Leaving their mother to establish a new territory of their own

091 00:07:21:10 00:07:25:16

Or seeking out a new nest while remaining in the larger, shared family territory

092 00:07:25:23 00:07:29:19

Intergenerational interactions being highly limited past maturation

093 00:07:30:01 00:07:34:15

With some species not being able to recognize their own offspring at all after leaving the nest

094 00:07:34:24 00:07:41:23

And though lifespans may vary greatly between species, the vast majority of muroids only live about a year due to predation

095 00:07:42:11 00:07:48:07

Their natural enemies including all forms of felines, dogs, wolves, raptors, snakes and lizards

096 00:07:48:19 00:07:53:05

Being among the base prey and a significant food source for most predators in the wild

097 00:07:53:10 00:07:59:21

As well as considered as a significant pest in human environments, hunted and killed by the use of traps and poisons

098 00:08:00:06 00:08:02:21

Due to their tendency to carry diseases

099 00:08:03:16 00:08:07:16

Many species of rats being significant disease and parasite carriers

100 00:08:07:23 00:08:13:12

Though most muroids are themselves highly resistant to a wide array of diseases, including cancer

101 00:08:13:17 00:08:19:11

Some species of common black or brown rat exhibiting a stronger immune system than that of any other mammal

SEGMENT 02:

102 00:08:31:05 00:08:34:16

Among the most uniquely specialized rodents we find the beaver

103 00:08:35:03 00:08:38:19

Unrelated to the giant mole, also known as a mountain beaver

104 00:08:40:01 00:08:42:20

True beavers consist of only two species

105 00:08:43:15 00:08:47:15

The North American Beaver, found across northern United States and Canada

106 00:08:49:13 00:08:54:06

And the Eurasian beaver, found throughout Central Europe, Scandinavia and Central Asia

107 00:08:55:19 00:08:59:17

Most closely related to pocket gophers and kangaroo rats

108 00:09:00:04 00:09:03:00

Being among the largest rodents in existence

109 00:09:04:06 00:09:08:18

Adult males being up to 40 inches long, weighing up to 70 pounds

110 00:09:09:20 00:09:15:16

They are immediately recognizable due to their distinct appearance with their large, highly developed front teeth

111 00:09:15:24 00:09:17:16

Flattened, scaly tail

112 00:09:17:23 00:09:20:05

Red, brown or black fur

113 00:09:20:21 00:09:22:16

Compact, rounded body

114 00:09:23:02 00:09:24:17

Short robust limbs

115 00:09:25:19 00:09:28:02

As well as their unique lifestyle

116 00:09:28:13 00:09:31:23

Being semi-aquatic, spending much of their lives in the water

117 00:09:32:21 00:09:37:18

As despite their relatively slow speed on land, beavers are also exceptional swimmers

118 00:09:39:22 00:09:45:04

Thanks to their webbed hind-feet and broad scaly tail used for underwater locomotion

119 00:09:46:05 00:09:52:02

With an extended lung capacity additionally allowing them to stay underwater for periods of up to 15 minutes

120 00:09:53:02 00:09:59:10

But particularly notable is their natural trait of building elaborate dams and canals along riverbeds and streams

121 00:09:59:17 00:10:07:09

Significantly shaping their environment in order to dam up water to form ponds deep enough not to freeze over completely during winter

122 00:10:07:14 00:10:11:01

As the beavers then build their nests adjacent to the pond

123 00:10:11:12 00:10:15:18

Nests known as lodges due to their intricate design of wood

124 00:10:15:24 00:10:20:20

Which may often only be accessible from an underwater passage, protecting it from predation

125 00:10:21:04 00:10:28:18

Using their extremely powerful and large front teeth to cut down even the toughest plant matter both for use in construction and for food

126 00:10:29:00 00:10:33:04

Felling entire trees, though they don't actually feed on the wood itself

127 00:10:34:12 00:10:39:17

Rather the cambium, the softer wood tissue close to the surface immediately under the bark

128 00:10:40:07 00:10:44:03

Leaving a large chunk of the raw timber for lodge and dam construction

129 00:10:45:21 00:10:50:24

Preferring willow, alder, birch, maple, cherry and cottonwood trees

130 00:10:53:07 00:10:57:00

Additionally eating water lilies, sedges and pondweed

131 00:10:58:19 00:11:02:13

Using their clawed dexterous forward digits to grasp the wood

132 00:11:03:22 00:11:07:22

Hauling materials either over land or floating it over the surface of the water

133 00:11:10:11 00:11:14:15

Their massive builds being a significant impact on their surroundings

134 00:11:15:11 00:11:20:04

Beaver ponds increasing not only water habitats for fish, insects and waterfowl

135 00:11:21:00 00:11:25:15

But also increasing surrounding stream flows by storing run-off in the rainy season

136 00:11:26:00 00:11:29:05

Raising the groundwater level of the surrounding bodies of water

137 00:11:29:15 00:11:35:00

Providing relief for hundreds of species of animals dependent on high water levels during droughts

138 00:11:35:07 00:11:41:08

As well as significant new breeding grounds and overwintering ponds for migratory fish such as trout and salmon

139 00:11:41:18 00:11:50:01

The felling of surrounding trees additionally promoting the growth of grass and shrubbery essential as cover for both birds and the insects they prey on

140 00:11:50:15 00:11:55:16

Unlike many other rodents of the northern hemisphere, beavers do not hibernate over winter

141 00:11:55:20 00:12:03:10

Instead changing their diet to incorporate shrubs, saplings and branches that they may plant underwater in the mud near the lodge entrance

142 00:12:03:18 00:12:09:16

Which may provide the only food available for the beaver as their pond may be frozen over to the point of isolation

143 00:12:09:20 00:12:11:19

The beaver inside of its lodge

144 00:12:12:10 00:12:18:13

Beavers have generally underdeveloped sense of eyesight as they typically have little use for it in the murky pond water

145 00:12:19:01 00:12:24:05

Relying instead on their sense of smell, touch and hearing for navigation and social interaction

146 00:12:24:19 00:12:30:11

As though beavers generally don't socialize with other unrelated beavers outside of mating season

147 00:12:31:02 00:12:35:17

They do remain in long-term relationships and family groups, being highly territorial

148 00:12:36:08 00:12:43:09

Building up mounds of sticks, twigs and wood shavings that they then mark with urine and by rubbing up against it with their scent glands

149 00:12:44:01 00:12:48:22

Signaling the age, sex and status of the individual as well as relationship status

150 00:12:49:17 00:12:56:16

As unlike other rodents, beavers are strictly monogamous, staying together for multiple breeding seasons after an initial pairing

151 00:12:58:01 00:13:02:23

Though if their mate dies, they will usually attempt to find another mate by the next mating season

152 00:13:04:13 00:13:10:01

Mating season occurs only once a year and only for a period of between 12 to 24 hours

153 00:13:11:07 00:13:15:14

When the female comes into estrus for a single day between late December and May

154 00:13:16:09 00:13:21:21

The female signaling her readiness by excreting on nearby mounds that the male will then catch the scent of

155 00:13:22:16 00:13:29:14

In the case of first-time mates, the male will adopt a territory adjacent to as many young unmated females as possible

156 00:13:30:02 00:13:36:12

Joining the territory of the first female accepting him, forming a larger shared family or paired territory

157 00:13:37:08 00:13:41:02

With a new, joint family lodge built by the largest pond of the territory

158 00:13:42:07 00:13:45:03

Mating itself is quick and commonly occurs in the water

159 00:13:45:21 00:13:51:23

Gestation periods lasts on average between 105 and 128 days, depending on the species

160 00:13:52:05 00:13:57:23

The female preparing a soft bed of foliage, sticks and twigs in the upper room of the lodge for birth giving

161 00:13:58:13 00:14:02:15

Typically anywhere between 1 to 9 young, or kits, are born

162 00:14:02:20 00:14:06:10

Depending on the availability of food and the overall health of the mother

163 00:14:06:21 00:14:09:17

Though commonly only 3 or 4 at most

164 00:14:10:15 00:14:14:08

Unlike many rodents, the eyes of the kits are open from birth

165 00:14:15:04 00:14:19:04

They are covered with a soft juvenile fur, weighing about a pound each

166 00:14:20:01 00:14:25:09

Within 30 minutes from being born, they can already move around and swim along the surface of the water

167 00:14:25:19 00:14:28:07

Able to hold their breath underwater within a month

168 00:14:28:10 00:14:30:16

By which time they are already well past weaning

169 00:14:31:06 00:14:35:02

Digesting plant matter already at 1 to 2 weeks of age

170 00:14:35:13 00:14:38:10

The young are cared for extensively by both their parents

171 00:14:39:14 00:14:43:06

The mother beaver carrying her kits on her back whenever they get tired

172 00:14:43:15 00:14:49:24

The father beaver helping by bringing home food and teaching the kits how to swim, how to forage for food and how to build

173 00:14:50:17 00:14:54:01

Older siblings additionally assisting in the care of the new litter

174 00:14:54:16 00:14:58:18

Young beavers reach adulthood at between 18 to 22 months of age

175 00:14:59:11 00:15:03:20

At 2 years of age, they leave their parents lodge to find a territory of their own

176 00:15:04:02 00:15:07:09

With most beavers only reproducing well into their third year

177 00:15:07:14 00:15:10:01

Beaver lifespans are generally relatively long

178 00:15:10:06 00:15:12:12

Lasting up to 24 years in the wild

179 00:15:12:15 00:15:14:24

Continuously growing throughout their lives

180 00:15:15:04 00:15:20:23

Along with their front teeth, which continuously grow hard enamel to counteract all forms of wear and tear

181 00:15:21:05 00:15:27:20

Though they may often be targets of predators such as coyotes and mountain lions, black bears and particularly lone wolves

SEGMENT 03:

182 00:15:41:10 00:15:45:10

Squirrels are one of the most recognizable groups of rodents in existence

183 00:15:45:24 00:15:50:06

They are a widespread, highly diverse family of small to medium-sized rodents

184 00:15:50:14 00:15:58:03

Including tree squirrels, ground squirrels, flying squirrels, chipmunks, marmots, groundhogs, woodchucks and prairie dogs

185 00:15:58:10 00:15:02:10

With nearly 300 species overall across 5 subfamilies

186 00:16:02:17 00:16:05:16

Most closely related to the dormouse and giant mole

187 00:16:06:00 00:16:10:12

They exist nearly worldwide, including Eurasia, Africa and the Americas

188 00:16:10:21 00:16:14:18

Having been artificially introduced to Australia and its surrounding islands

189 00:16:14:24 00:16:17:07

They exist in nearly every type of environment

190 00:16:17:09 00:16:19:18

From tropical rainforest to stone deserts

191 00:16:20:00 00:16:23:10

Though most commonly in coniferous and temperate leaf forests

192 00:16:23:17 00:16:27:17

Anywhere their primary food source of seeds, berries and nuts may be found

193 00:16:27:24 00:16:32:23

While some species may also supplement their diet with insects, smaller animals and bird eggs

194 00:16:33:03 00:16:37:17

Being highly opportunistic omnivores when their normally herbivorous diet is challenged

195 00:16:37:21 00:16:42:19

Excess food often being stored in caches such as hidden nooks and hollows in trees

196 00:16:42:24 00:16:44:00

Even underground

197 00:16:44:09 00:16:48:18

Often assisting in the reproduction of trees and plants by burying their seeds

198 00:16:49:00 00:16:55:01

Many species are also highly territorial with fixed home ranges and individually preferred trees or burrows

199 00:16:55:08 00:17:01:19

They range from the smallest squirrel, the African Pygmy squirrel, at a mere 3 inches long, weighing a third of an ounce

200 00:17:02:06 00:17:06:19

To the largest, the Laotian giant flying squirrel at over 3 feet in length

201 00:17:07:02 00:17:10:19

While the Alpine marmot is the heaviest, at up to 20 pounds

202 00:17:11:10 00:17:16:02

Larger species as well as northern smaller species often using seasonal hibernation

203 00:17:16:10 00:17:24:21

Feeding considerably during the summer to sustain them over a period of reduced activity during the colder months, starting in late fall and continuing until spring

204 00:17:25:03 00:17:27:11

Particularly common for burrowing species

205 00:17:28:00 00:17:34:15

Most have slender bodies with bushy tails and large eyes, with hind legs commonly longer and stronger than their forelimbs

206 00:17:35:02 00:17:39:07

All covered in a soft and silky fur, either grey, brown, black or red

207 00:17:39:13 00:17:41:05

With smaller variations of white being found among isolated tree squirrel populations

208 00:17:41:10 00:17:47:05

Squirrels rely primarily on their superior sense of eyesight for navigation, foraging and to avoid predators

209 00:17:47:13 00:17:49:24

As well as strong sense of smell and hearing

210 00:17:50:04 00:17:54:04

Being highly cautious of any unexpected nearby sounds and smells

211 00:17:54:12 00:18:01:04

Many species additionally have a highly sensitive sense of touch with significant whiskers found on both their heads and limbs

212 00:18:01:11 00:18:08:00

Helping them navigate through trees and burrows alike when visibility is reduced or otherwise obscured by foliage

213 00:18:08:05 00:18:15:21

Most squirrels being diurnal or crepuscular, often seen foraging in the early morning and late afternoon, unlike many other rodents

214 00:18:16:02 00:18:19:02

While flying squirrels are almost exclusively nocturnal

215 00:18:19:06 00:18:22:23

Only juveniles and lactating females being partially diurnal

216 00:18:23:04 00:18:27:22

Ground squirrels in particular spending most of their time within their burrows in hibernation

217 00:18:28:02 00:18:33:10

Only coming out for a few hours each day to forage for food which they then bring back to the burrow

218 00:18:33:13 00:18:37:03

While tree squirrels are considerably more active and less sedentary

219 00:18:37:08 00:18:40:21

Continuously searching for food across the entirety of their home range

220 00:18:41:00 00:18:44:00

Social behavior may similarly vary between species

221 00:18:44:04 00:18:48:18

Ground-dwelling squirrels such as ground squirrels and marmots often being highly social

222 00:18:48:22 00:18:55:19

Forming well-developed colonies centered on one or more families of interrelated individuals led by a dominant male

223 00:18:55:23 00:19:00:02

Families usually numbering between 5 to 10, up to 20 individuals

224 00:19:00:06 00:19:03:21

Prairie dogs even forming large so-called town colonies

225 00:19:03:24 00:19:07:01

Consisting of between 15 to 26 families

226 00:19:07:06 00:19:12:18

Further divided into wards of smaller clusters of family groups with overlapping territories

227 00:19:12:23 00:19:15:23

Utilizing social grooming for colony cohesion

228 00:19:16:06 00:19:19:18

While tree-dwelling species are considerably more solitary

229 00:19:19:24 00:19:22:02

As well as the ground-dwelling groundhogs

230 00:19:22:07 00:19:25:13

Though even then they may group together in family group nests overnight

231 00:19:25:18 00:19:30:04

As such, communication between squirrels is extensive, although simplistic

232 00:19:30:07 00:19:35:13

Mainly consisting of a variety of chirping or squeaking vocalizations for formal identification

233 00:19:36:05 00:19:37:13

And to signal alarm

234 00:19:38:22 00:19:41:09

As well as body language and scent markings

235 00:19:41:13 00:19:46:07

Many squirrels using scent glands or urine markings on trees to delineate their territory

236 00:19:46:13 00:19:47:24

As well as to attract a mate

237 00:19:48:09 00:19:54:02

Mating season for most squirrels occurs once or twice a year, depending on the species and age of the individual

238 00:19:54:05 00:20:00:02

Many younger females normally having only a single litter a year, often in late winter or early spring

239 00:20:00:06 00:20:03:05

While older squirrels may have a secondary litter in the summer

240 00:20:03:08 00:20:05:08

Most ground squirrels being polygynous

241 00:20:05:14 00:20:13:09

With one male mating with several females, often in the form of harems, where the male will mate with a select few females repeatedly at the same time

242 00:20:13:17 00:20:18:13

Though a few species of marmot have been shown to form long-term monogamous pairs as well

243 00:20:18:21 00:20:20:24

While many tree squirrels are polyandrous

244 00:20:21:02 00:20:24:14

The female pursued by several males in competition with one another

245 00:20:24:21 00:20:30:16

Mating with between 1 to 16 males each mating season during a limited fertile period

246 00:20:30:19 00:20:33:05

Mating is often preceded by a period of courtship

247 00:20:33:13 00:20:37:17

The male either courting the female through social grooming, calls and chasing

248 00:20:37:23 00:20:40:00

Or by presenting her gifts of food

249 00:20:40:11 00:20:44:08

Mating itself is usually very quick and repeated until conception occurs

250 00:20:44:15 00:20:49:07

With non-social species, the male then leaves to seek out another mate or food

251 00:20:49:20 00:20:55:04

Leaving the female to construct her own nest in a hollow tree or crevice to prepare for birth giving

252 00:20:55:14 00:21:00:17

Squirrel gestational periods typically lasting between 3 to 5 weeks, depending on the species

253 00:21:01:01 00:21:06:02

The female feeding constantly during this time to ensure she has an ample supply of milk

254 00:21:06:14 00:21:09:03

Often gathering food within her nest as well

255 00:21:09:13 00:21:14:12

Commonly between 2 to 6 young are then born, though up to 9 are possible for some species

256 00:21:14:16 00:21:19:20

The young are born small, naked, toothless and blind, weighing less than a tenth of an ounce

257 00:21:20:04 00:21:23:11

The female often being the only primary caregiver of her young

258 00:21:23:24 00:21:26:20

Nursing for a period of up to 6 to 10 weeks

259 00:21:27:04 00:21:31:24

The young quickly developing with their first coat of fur emerging after 2 to 3 weeks

260 00:21:32:10 00:21:34:12

Their eyes opening soon thereafter

261 00:21:35:04 00:21:37:14

Developing all their teeth by a month old

262 00:21:38:01 00:21:42:19

At which point they may start consuming solid food and begin to venture out of the nest

263 00:21:43:07 00:21:48:23

Most species reaching adult size at between 6 months to a year, maturing around the same time

264 00:21:49:07 00:21:53:17

As females need to reach a minimum body mass before being able to enter oestrus

265 00:21:54:04 00:21:59:00

Commonly the offspring either leaves the nest on their own at this point, or are forcibly removed

266 00:21:59:15 00:22:02:00

With the female becoming increasingly hostile

267 00:22:02:17 00:22:06:10

Particularly males being regularly forced out of their birth territory

268 00:22:07:00 00:22:10:12

While in more social species, females may sometimes remain

269 00:22:10:20 00:22:16:19

Fatality rates among juvenile squirrels is high due to predation from dogs, cats, raptors and snakes

270 00:22:17:15 00:22:21:17

Squirrels also significantly affected by diseases and parasites

271 00:22:22:10 00:22:30:17

Most squirrels thus don't survive past their first year and due to their generally small size may continue to be vulnerable to predation for the rest of their lives

272 00:22:31:12 00:22:36:04

Lifespans among adult tree squirrels is typically 5 to 10 years in the wild

273 00:22:36:16 00:22:39:00

15 years for larger species

OUTRO:

274 00:22:41:20 00:22:42:19

Squirrels

275 00:22:43:11 00:22:44:14

Just like muroids

276 00:22:44:23 00:22:45:22

And beavers

277 00:22:46:20 00:22:48:12

Along with other rodents

278 00:22:49:10 00:22:52:16

Form not only a base prey for apex predators

279 00:22:53:17 00:22:56:24

But a crucial component in their ecosystem at large

280 00:22:57:18 00:22:58:21

Through their foraging

281 00:22:59:19 00:23:03:05

As well as their direct intervention in shaping their surroundings

282 00:23:04:15 00:23:06:10

Whether in large communities

283 00:23:07:01 00:23:08:08

Smaller groups

284 00:23:09:08 00:23:10:24

Or as loners and pairs

285 00:23:12:11 00:23:14:13

They are all members of a society

286 00:23:15:11 00:23:17:05

An animal society

METRICS:

022 00:01:07:12 00:01:13:10

The smallest, the pygmy gerboa, being less than 5 centimeters long, weighing less than 4 grams

023 00:01:13:22 00:01:20:00

The largest, the capybara, being over 120 centimeters long and weighing up to 90 kilograms

036 00:02:21:22 00:02:26:15

They range in size between a mere 5 centimeters long, as with some species of hamster

037 00:02:27:02 00:02:31:15

To up to 60 centimeters long, weighing 2 to 3 kilograms, as with many muskrats

081 00:06:36:19 00:06:43:02

Most muroid young are born naked and helpless, weighing as little as 0.3 grams for smaller species

109 00:09:04:06 00:09:08:18

Adult males being up to 100 centimeters long, weighing up to 32 kilograms

199 00:16:55:08 00:17:01:19

They range from the smallest squirrel, the African Pygmy squirrel, at a mere 7 centimeters long, weighing 10 grams

200 00:17:02:06 00:17:06:19

To the largest, the Laotian giant flying squirrel at over 90 centimeters in length

201 00:17:07:02 00:17:10:19

While the Alpine marmot is the heaviest, at up to 9 kilograms

256 00:21:14:16 00:21:19:20

The young are born small, naked, toothless and blind, weighing less than 3 grams