

PENGUIN

CITY

Chinstraps rule the roost in these loud, crowded colonies. BY SCOTT ELDER

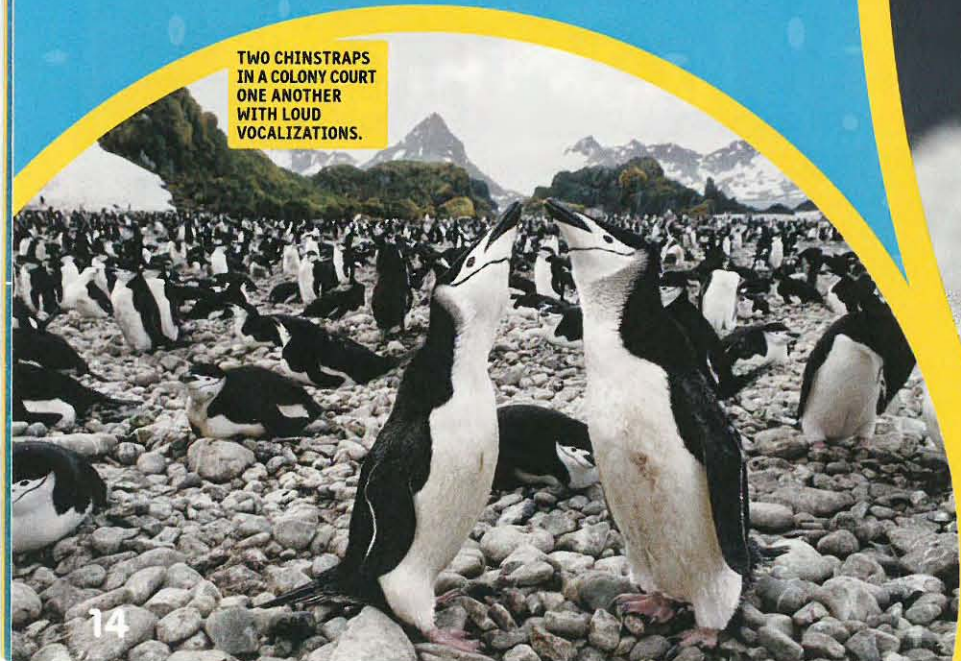
A sprawling city bustles with the loud racket of morning rush hour. Crowds of commuters hurry past each other, skirting by construction sites. Suddenly one traveler bumps into another and sets off a shouting match. Others in the vicinity join in. Adding to the loud squabble are honking and screeching noises from down the road, where there's yet another traffic jam. Eventually the gridlock eases and the commuters continue, ready to get on with their day.

This may seem like a typical morning in a big metropolis like New York City. But the scene is set in Antarctica, and these commuters are really chinstrap penguins on their way to their foraging grounds. Chinstraps are flightless, two-foot-tall birds that live in and around Antarctica and nest in crowded communities called colonies. Many chinstrap colonies are home to hundreds of thousands of individuals and have a lot in common with man-made urban centers. The seabirds that inhabit them are the ultimate city slickers.

BIRD BUILDERS

Like human cities, chinstrap colonies are extremely noisy. Every November, near the start of summer in Antarctica, members of different colonies arrive at their breeding grounds on Antarctica's shores. Here the chinstrap penguins squawk practically nonstop.

TWO CHINSTRAPS IN A COLONY COURT ONE ANOTHER WITH LOUD VOCALIZATIONS.



Chinstrap penguins are named for facial markings that resemble helmet chinstraps.

To attract a mate, male chinstraps stretch out their wings, throw back their heads, and bray.

These penguins eat snow to cool down when they feel too warm.



Where chinstrap penguins live

PLAY KRILL SMACKDOWN
natgeokids.com/february

GET MORE!
PENGUIN PLAYLIST
natgeokids.com/february

FRANS LANTING / NATIONAL GEOGRAPHIC CREATIVE (COURTING MATES); KLEIN & HUBERT / NATURE PICTURE LIBRARY (BIG IMAGE); © JAMES LOWEN / FLPA / MINDEN PICTURES (COLONY FROM ABOVE); MARTIN WALZ (MAP)

PENGUINS IN A COLONY GREET EACH OTHER WITH NOISY SQUAWKS.



They create enough noise to rival the shouts, blaring horns, and other hubbub of a real metropolis. "They're incredibly loud," biologist Ron Naveen says. "In fact I use earplugs when I observe them."

Once the animals in a colony settle on the breeding grounds, they begin an activity you see in a lot of urban areas: construction work. Mated pairs use pebbles to build nests that are up to 20 inches wide. Similar to houses in many human neighborhoods, the nests are arranged side by side. The animals live in close quarters for safety. An isolated nest would be a prime target for a skua, a predatory bird that swoops from the sky to snatch chinstrap eggs and chicks. "But together the animals can team up and ward off enemies," penguin researcher Heather Lynch says.

Chinstraps don't need to only look out for predators though. They must also be on alert for burglars within the colony. That's because the penguins regularly try to steal stones from one another's nests. The animals fend off would-be robbers by swatting them with their wings. Why are chinstraps so protective of their pebbles?

MATES NUZZLE EACH OTHER.



The rocks will shield eggs and chicks from snowmelt, which could be deadly for the developing offspring if it seeps into the nest.

A few weeks after a pair builds its roost, the female lays two eggs. They hatch about a month later in mid- to late December. Because it's summertime, the sun barely sets. So similar to a big city, their habitat is well lit nearly 24 hours a day. But despite the bright light, temperatures remain cold. To keep their young warm, chinstrap moms and dads take turns squatting right on top of them.

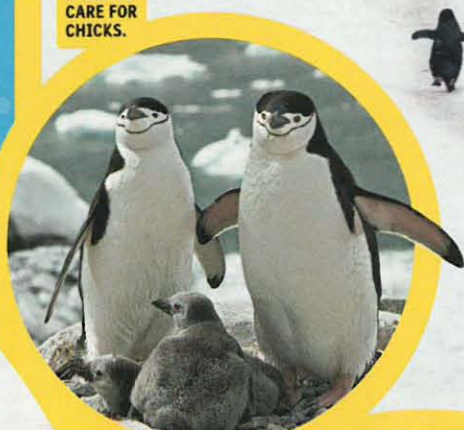
EATING OUT

When a parent isn't babysitting, it heads off to work. The parent's job? Catching fish for the family.

To commute from their homes to the ocean, the chinstraps in a community always waddle along the same routes. These "roads" have been used by colony members for so long that they've become well-worn footpaths. Like city streets, the paths bustle with individuals. Sometimes the flow of commuters comes to a halt, resulting in a chorus of screeches. Nobody enjoys traffic!

After traveling a mile or more from their nesting site, the penguins finally reach the colony's "food district" at the edge of the sea. From here they get to work, diving into the water in search of shrimplike krill.

PENGUIN PARENTS CARE FOR CHICKS.



A CHICK SITS ON ITS NEST AS A PARENT COVERS IT FOR WARMTH.



A BIRD CARRIES A STONE TO BUILD ITS NEST.



THE PENGUIN'S SLEEK BODY SHAPE MAKES THE BIRD AN EXCELLENT SWIMMER.



Chinstraps usually dive to depths of around 150 feet.

These birds sometimes toboggan, or slide around on their bellies.

CHINSTRAPS WALK ALONG WELL-WORN PATHS TO GET AROUND THEIR COLONY.



CHINSTRAPS DIVE FROM ICEBERGS INTO THE SEA TO SEARCH FOR FOOD FOR THEIR FAMILIES.

Chinstraps are excellent swimmers. "The birds are torpedo-shaped," Naveen says. "Their sleek form allows them to zip through the water at 20 miles an hour." The speedy chinstraps catch enough krill to fill their bellies. Then they emerge from the water and get back on the penguin expressway toward home.

Back at their nests, the returning parent is greeted by hungry offspring. Luckily the moms and dads have brought home takeout. They regurgitate some of the krill they devoured and feed it to their young. With regular meals, the youngest members of the penguin city begin to grow.

WINTER BREAK

In late January, about a month after chinstrap penguin chicks hatch, offspring are left in groups so both moms and dads can search for food. The groups—which are sort of like community day-care centers—huddle together for warmth and protection. Eventually the chicks begin to roam the colony together. After they've shed their gray, downy coats and grown black-and-white feathers at about eight weeks of age, the young chinstraps strike out on their own. They head to the sea where they must learn how to catch food to survive.

By late March (the start of fall) penguin cities enter their off-season. During this time, colonies disperse. Members spend

the next several months at sea. Next November the birds will return to re-create their metropolis. New residents will hatch, and parents will once again prepare their chicks for life in the big city.

ROBOT PENGUIN



Between 2008 and 2012, scientists in Antarctica sent a remote-controlled robot designed to look like a bird into a colony of emperor penguins. These birds tend to shy away from humans. The researchers figured that the bot—which had a built-in camera—would be able to spy on the colony without disrupting it. And they were right. The bot was accepted into the community and filmed actual penguins. Scientists plan to use the undercover agent in the future to learn more about the animals. This is definitely not a bird-brained idea!

© BRETT STEPHENSON / NPI / MINDEN PICTURES (GREETING EACH OTHER); ENRIQUE B. AGUIRRE AVES / ALAMY (CARRYING STONE); CHRISTIANA CARVALHO / ELOPA / MINDEN PICTURES (PARENTS WITH CHICK); © JAM VERNER / MINDEN PICTURES (MATES NUZZLING); MICHAEL S. WOLAN / AGE FOTOSTOCK (CHICK CLOVE-UP); MICHAEL MELFORD / NATIONAL GEOGRAPHIC CREATIVE (WALKING PATH); HORALLES / AGE FOTOSTOCK (SWIMMING); TOM MURPHY / NATIONAL GEOGRAPHIC CREATIVE (DIVING); NATURE METHODS, LE MAHO AND COLLEAGUES / WERNER ROBOT