

**GREEN
UMMAH** **GUIDE**

**NATIONAL
WILDLIFE
AREAS**
in Southern
Ontario



Green
UMMAH

ASSALAMU ALAIKUM!

Welcome to the Guide to National Wildlife Areas in Southern Ontario!

This guide is about the role and importance of National Wildlife Areas and Migratory Bird Sanctuaries in Ontario. These protected areas are home to a wide variety of Allah's creation, including birds, animals, plants, and other forms of life. As Muslims, it is our duty to protect the environment and the wildlife. By learning about different creatures in this guide, you can become more connected to wildlife and nature, learn how we can protect these areas, and appreciate Allah's amazing creation.





In the Qur'an, Allah teaches us, *“All living beings roaming the earth and winged birds soaring in the sky are communities like yourselves...”* (Al-An'aam, Qur'an, 6:38). This means that “Allah has created living beings (like animals, birds, and fish) just like He created human beings. He provides for all and is merciful to all. They all belong to communities and have their own systems of living” (Dr. Mustafa Al-Khattab, *The Clear Qur'an*).

National Wildlife Areas are situated on various traditional lands of Indigenous and Métis peoples, who have stewarded these lands long before the arrival of the Europeans, and continue to care for the land. Truth and Reconciliation is an ongoing process that requires not only government action, but places a responsibility on all settlers in the lands now known as Canada.

In this context, we encourage you to visit www.native-land.ca to learn about the lands we occupy, and the Indigenous peoples who have taken care of these lands since time immemorial.

WHO IS GREEN UMMAH?

Green Ummah is a nationally incorporated non-profit organization seeking to create an environmental *and* environmental justice movement within the growing Muslim community. Green Ummah was created in 2020 by youth advocates for the environment who found a gap in the Canadian Muslim community as it pertains to environmental consciousness. Green Ummah hosted Canada's first Muslim-organized environmental conference in 2021 and launched the first-ever ready- to-teach curriculum focused on *Islam & the Environment and Environmental Justice* (The Greening Our Communities Toolkit).

Learn more at greenummah.org.

Visit your nearest National Wildlife Area or Migratory Bird Sanctuary to experience and observe the diverse creatures laid out in this guide!

We encourage you to complete the activities in this guide with your family and welcome you to share your experience with Green Ummah on our social media

@GreenUmmah.



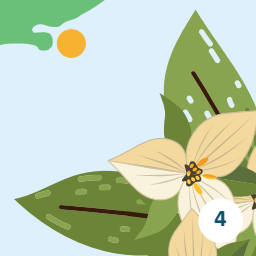


Across Canada, there are over 50 National Wildlife Areas.

Find the ones located in Southern Ontario on this map. Consider planning a trip with your family to a National Wildlife Area that you'd like to visit, and don't forget to bring your Green Ummah Guide!

Southern Ontario NWAs

- St. Clair National Wildlife Area
- Big Creek National Wildlife Area
- Long Point National Wildlife Area
- Prince Edward Point National Wildlife Area
- Wye Marsh National Wildlife Area



MEET THE NATIONAL WILDLIFE AREAS



St Clair NWA



Big Creek



Prince Edward Point



Long Point



Wye Marsh

NATIONAL WILDLIFE AREA

What is a National Wildlife Area?

National Wildlife Areas, or NWAs for short, are areas designated by Environment and Climate Change Canada under the Canada Wildlife Act (1985) to conserve and protect migratory birds, species at risk, native wildlife, and their habitats.

Why are they important?

NWAs play an important role in providing a safe home for the wildlife in Ontario. Over 50 National Wildlife Areas in Canada protect upwards of 3.5 million hectares of land, with nearly half of this area encompassing water bodies—that's almost five times the size of the Greater Toronto Area! Each wildlife area was chosen for a unique purpose, such as its role in helping important bird or insect migration.

What's the difference between a National Wildlife Area and a National or Provincial Park?

Parks preserve the natural landscape for recreation and enjoyment for us through activities like camping, hiking, and canoeing. On the other hand, National Wildlife Areas are created for the main purpose of protecting and conserving wildlife.



MIGRATORY BIRD SANCTUARIES

What is a Migratory Bird Sanctuary?

Many birds move from one region to another, or migrate, at different times of the year for warmer climates, food, and other needs. Migratory Bird Sanctuaries (MBS) are areas designated by Environment and Climate Change Canada through an important law called the Migratory Birds Convention Act (1994). They protect and conserve the habitats of migratory birds by making it illegal to hunt, disturb, or harm birds in the sanctuary.

Why are they important?

Without sanctuaries, birds migrating through Ontario wouldn't have a safe area to rest on their long journey across the country.

“Have they not seen the birds glide in the open sky? None holds them up except Allah. Surely in this are signs for those who believe.”

SURAT AN-NAHL, QU'RAN, 16:79

“Have they not seen the birds above them, spreading and folding their wings? None holds them up except the Most Compassionate. Indeed, He is All-Seeing of everything.”

SURAT AL-MULK, QUR'AN, 67:19



REFLECTION CORNER

Have you ever thought about how amazing it is that billions of creatures share this Earth? Each of them is created uniquely by Allah.

Reflect on one of Allah's names: **Al-Khaliq or Al-Khallaq, The Creator.** Allah is the One who brings things into existence from nothing, designs them, and sustains them. “He laid out the earth for all beings.”

SURAT AR-RAHMAN, QUR'AN, 55:10

Allah placed the earth for all the unique creatures to live on it, and we are all part of His creation. Look closely and appreciate the elements of nature around you, and say *Subhan Allah* (Glory be to God) to praise Allah's perfection and beauty!

Did you know that *all* of Allah's creation, not just humans, also praise Allah in their own ways?

“Do you not see that Allah is glorified by all those in the heavens and the earth, even the birds as they soar? Each ‘instinctively’ knows their manner of prayer and glorification. And Allah has ‘perfect’ knowledge of all they do.”

SURAT AN-NUR, QUR'AN, 24:41








SPECIES AT RISK

Some species that live in the NWAs or migrate through a bird sanctuary are unfortunately at risk of dying out due to factors like climate change and invasive species. These species are classified as 'At Risk' under the Species At Risk Act (SARA).

MATCHING ACTIVITY: WHERE DO THESE CREATURES LIVE?

Use the matching grid to name the habitat that these Species at Risk live in!

ANIMAL IN HABITAT		NAME OF HABITAT
 <p>1. Least Bittern</p>	 <p>4. Chimney Swift</p>	A. Ledges of rock cliffs
 <p>2. Bank Swallow</p>	 <p>5. Short Eared Owl</p>	B. Hollowed out standing trees or inactive chimneys
 <p>3. Peregrine Falcon</p>	 <p>6. American Badger</p>	C. Open fields and grasslands
		D. Underground burrows
		E. Shallow marshes with emerging vegetation
		F. Burrows in vertical surfaces

"How many are the creatures that cannot secure their provisions! It is Allah Who provides for them and you as well. He is indeed the All-Hearing, All-Knowing." SURAT AL-'ANKABUT, QUR'AN, 29:60



ANSWERS:
 1 - E
 2 - F
 3 - A
 4 - B
 5 - C
 6 - D



START BIRDING!

Birding is an amazing activity to do outside. This is when you start noticing, observing, and appreciating birds. With over 500 species of birds in Ontario, there's always lots to see. During migratory seasons, bird sanctuaries host rare species that you will not find in Ontario. Use our guide below to see how many species you can identify!

HOW TO GET STARTED

Some things you might need to start birding are

- Binoculars
- Bird guide book, such as the **Junior Birder Guide** from Nature Canada
- A phone or tablet!



APPS TO USE

A phone can be the perfect tool to help you on your birding adventures, and with these apps you'll become an expert in no time. A parent or adult can help download one of these apps to get you started.



Merlin Bird ID

This app can identify birds just from their song! Download the library at home then hit 'record' whenever you hear a bird and find out who is singing that song.



eBird

Ever wonder what birds other people are seeing in your area? Now you can know! eBird lets you track what, when, where, and how many birds you see. You can also check out what other people around you are spotting on their bird walks with public trip reports.



iNaturalist

Don't know what bird you just saw? Snap a picture and upload it to iNaturalist and let the app take care of the rest. With the ability to identify almost any plant, animal, insect, and invertebrate from just an image, and having other experts review your ID to confirm it, this is definitely an app to keep with you.

WORD SEARCH

Look for the **BOLDED** words on this page in the puzzle on the next page

BIRDS AT RISK



ACADIAN Flycatcher



Bald **EAGLE**



Barn **SWALLOW**

Bank Swallow

BOBOLINK

Buff-Breasted
SANDPIPER

Canada Warbler

Cerulean **WARBLER**

Chimney **SWIFT**

Common **NIGHTHAWK**

Eastern
MEADOWLARK

Eastern
Whip-Poor-Will

Eastern
Wood-**PEWEE**

Golden-Winged
Warbler

Hooded Warbler

Horned **GREBE**

King **RAIL**

Least **BITTERN**

Louisiana Waterthrush

Northern **BOBWHITE**

Olive-Sided
FLYCATCHER

Peregrine **FALCON**

Piping **PLOVER**

PROTHONOTARY
Warbler

Red-Headed
Woodpecker

Red Knot

Red-Shouldered Hawk

Rusty **BLACKBIRD**

Short-Eared **OWL**

Wood **THRUSH**

Yellow Rail

Yellow-Breasted **CHAT**

MAMMALS AT RISK

American **BADGER**



Little Brown **BAT**



REPTILES & AMPHIBIANS AT RISK

Chorus Frog

FOXSAKE

Hog-nosed Snake



Fowler's **TOAD**

Milk Snake

RIBBON Snake

QUEENSNAKE

Blanding's Turtle

Northern Map **TURTLE**

SNAPPING Turtle

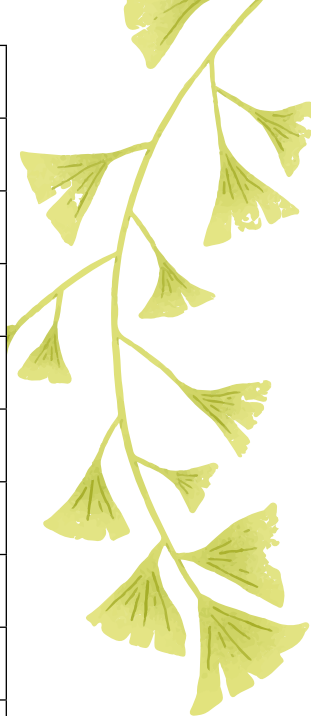
PAINTED Turtle

"And in your own creation, and whatever living beings He dispersed, are signs for people of sure faith."

SURAT AL-JATHIYAH, QUR'AN, 45:4



A	E	P	C	H	A	T	U	K	E	R	L	E	P
D	T	D	R	I	B	K	C	A	L	B	K	L	H
E	I	E	N	N	E	L	G	A	E	R	N	T	A
T	H	W	T	I	B	L	N	L	A	S	O	R	C
N	W	A	N	G	E	I	B	L	O	W	C	U	A
I	B	R	B	H	R	B	W	O	I	I	L	T	D
A	O	B	P	T	G	O	E	B	T	F	A	W	I
P	B	L	E	H	D	P	W	B	E	T	F	H	A
R	O	E	W	A	E	K	A	N	S	X	O	F	N
I	L	R	E	W	D	C	L	R	E	V	O	L	P
B	I	M	E	K	H	S	D	A	O	T	A	B	L
B	N	A	A	G	N	I	P	P	A	N	S	O	I
O	K	H	A	A	V	S	W	A	L	L	O	W	A
N	L	S	A	T	H	R	U	S	H	A	R	A	R



Words can appear forwards, backwards, vertically, horizontally or diagonally.

Answers on page 18.

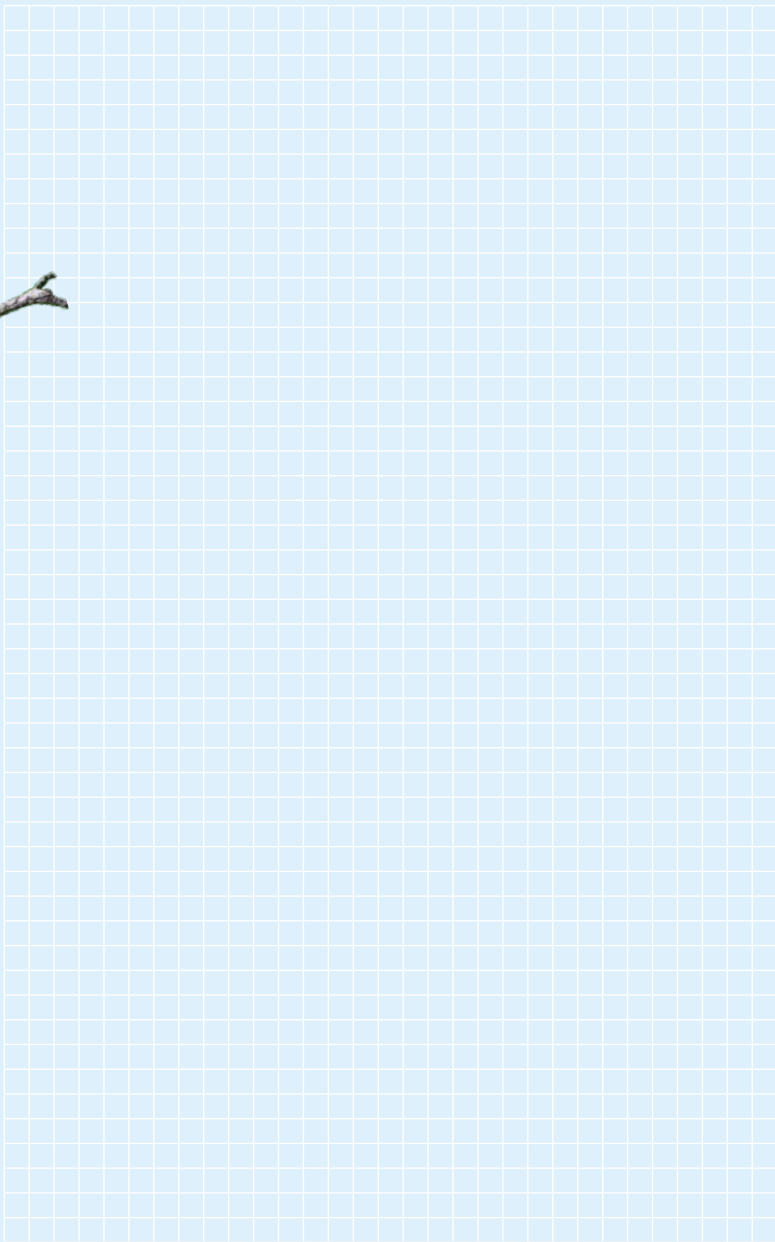
WHAT YOU CAN DO TO HELP!

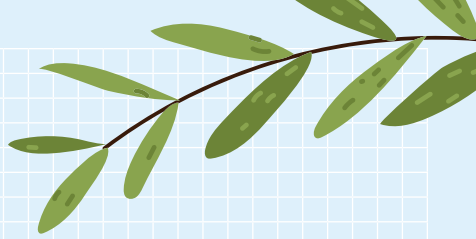
If you see any of these species, report it to the Government of Ontario through the Natural Heritage Information Centre ontario.ca/page/report-rare-species-animals-and-plants



REFLECTIONS

Jot down or sketch your reflections and observations!





NOCTURNAL LIFE


“And Allah has created from water every living creature. Some of them crawl on their bellies, some walk on two legs, and some walk on four. Allah creates whatever He wills. Surely Allah is Most Capable of everything.”

SURAT AN-NUR, QUR’AN, 24:45


Did you know about 70% of mammals are nocturnal?

These animals may be hard to spot at night, but you can learn all about our night-time friends in this guide. Nocturnal animals come in all shapes and sizes, and Allah created them with unique ways of dealing with the challenges that come with the dark by using their senses in interesting ways.


For example, frogs and toads lose moisture through their skin, so they need to stay out of the sun to avoid drying out which can be dangerous for them. During the day, they sit in shaded areas, but at night, they come out, patiently waiting to snatch their prey!



BATS eat small bugs and fruit, and use echolocation to navigate through the air.

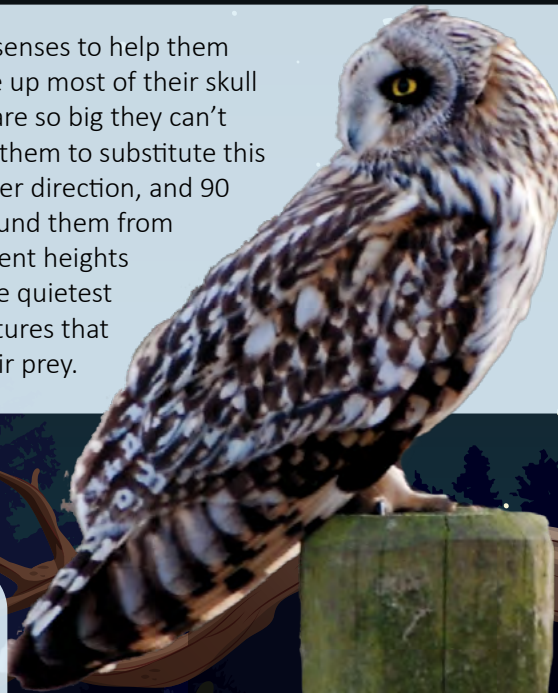


SKUNKS don't have the greatest eyesight or hearing, but they can scare off predators with a foul smelling musk that can be sprayed up to 6m away!



FROGS AND TOADS are most active at night because they quickly lose moisture through their skin, and can dry out in the sun.

OWLS are the silent hunters of the night and have keen senses to help them as apex predators. Owls' large cone-shaped eyes that take up most of their skull give them incredible night vision, but because their eyes are so big they can't move them like humans can. Their incredible neck allows them to substitute this by just moving their entire head up to 270 degrees in either direction, and 90 degrees up or down, allowing them to see everything around them from one position. Their incredible ears are positioned at different heights and face different directions allowing them to pinpoint the quietest of peeps from their prey, and their wings have special features that allow them to fly completely silently so as to not alert their prey.



WOLVES howl for a few different reasons: to keep connected with others in the pack, to protect their territory from intruders, and to bond with each other.



RACCOONS have great night vision, are excellent swimmers, and hunt fish, frogs, and crayfish.



REFLECTION CORNER

Nocturnal animals that rest in the day are active during the night. Although we may not see them, Allah is aware of each one of His creations.

"To Him belongs whatever exists in the day and night. And He is the All-Hearing, All-Knowing."

SURAT AL-AN'AAM, QUR'AN, 6:13

INVASIVE SPECIES

Invasive species are wildlife from other parts of the world that are introduced, often accidentally, by humans through the global movement of materials. They pose a major threat to native wildlife in Ontario, with the potential to cause environmental, economical, and societal damage. Not all non-native species are considered invasive though, as the label comes from the potential to cause harm. Invasive species either kill, crowd out, or outcompete the native wildlife because they often do not have a native predator to keep their population in control. You may have heard of some common species such as the Emerald Ash Borer and Zebra Mussel, although other animals like cats can also be considered invasive due to their due to their impact on bird life.

Learn more about invasive species in Ontario at invasivespeciescentre.ca



SPONGY MOTH

The spongy moth came to Canada in the late 1800s, spreading through the transportation of firewood and other household items. These insects are most destructive when they are caterpillars, targeting native hardwood trees in southern Ontario and defoliating (eating the leaves) to the point of damaging the tree beyond its ability to grow again. Make sure to never move firewood and check for signs of spongy moth in your neighbourhood.



GARLIC MUSTARD

Introduced in the early 1800s from Europe, this bi-annual plant can take over forest understories with its aggressive growing habits. Through a property called allelopathy, the ability to alter the soils chemistry to create an unfavourable environment for other competing species, Garlic Mustard can outcompete native understory plants like Trilliums and Trout Lilies. Garlic mustard must be pulled and disposed of properly.





BUCKTHORN

Native to Europe and introduced in the 1880s, Buckthorn was intentionally planted for use in hedgerows and windbreaks. The plant can host harmful diseases like oat crown rust and soybean aphids which damage farmers' produce. Buckthorn also greatly impacts the abundance of native plant and bird life in any area it establishes by crowding out, allelopathy (changing the chemical composition of the soil so other plants can't grow), and promoting the establishment of other non-native species like specific earthworms. Buckthorn under one metre in moist soil can be pulled by hand, and all roots must be removed and disposed of properly.



INVASIVE PHRAGMITES

This aquatic plant can reach heights of up to five metres and outcompete all other native plants decreasing biodiversity. Make sure not to confuse these with native phragmites (*Phragmites americanus*) which don't grow as tall or dense and have a different stem structure. Invasive phragmites can cause monoculture stands (large areas with just one species of plant) and create fire hazards with bulk dead stalks. Do not plant phragmites as the native and invasive species can easily be mistaken for each other, and stay on designated trails to avoid contact with the plant and risk of spreading the seeds. This plant should not be composted.



ZEBRA MUSSEL

Zebra mussels live in freshwater bodies across Ontario, and they arrived through the ballast tanks of ships as larvae. By consuming phytoplankton, they outcompete any native species that would have eaten it, and in the absence of phytoplankton, toxic algae blooms become much more common. Although they can't move on a surface, their larvae are free floating and can spread rapidly. This can create large scale problems like blocking water intake structures for a community.





GET INVOLVED!

Grade 9 students at Safa and Marwa Islamic school pulling invasive species at the Wye Marsh NWA!

This was a sponsored trip in partnership with Green Ummah and Nature Canada as part of the Greening Our Communities Toolkit.



EXTRA READING

Want to learn more? Check out some of the resources below if you're interested in further reading or activities.

Nature Canada Junior Birder Guide

naturecanada.ca/wp-content/uploads/2018/04/2018-Junior-Birder-Guide-EN.pdf

This guide is packed with activities and bird identification tips, and is a great place to start if you're looking to try birding!

Invasive Species Centre

invasivespeciescentre.ca

This website has all the information, resources, best management practices, impacts, and history of the invasive species in Canada.

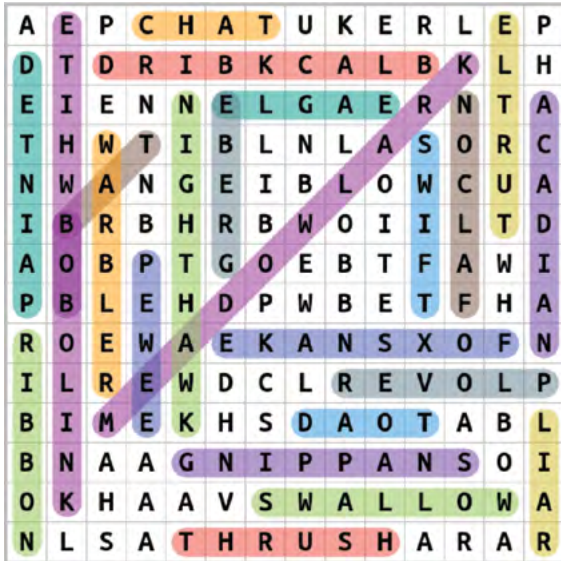
Map: National Wildlife Areas and Migratory Bird Sanctuaries

canada.ca/en/environment-climate-change/services/national-wildlife-areas/map.html

Find information on NWAs and bird sanctuaries in Ontario and across Canada on the Government of Canada website.



Word Search Solution



DISCOVER MORE!

Scan the QR code below to access Green Ummah's website and visit the links from this guide.



PHOTO CREDITS

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p3: squirrel- Jeremy Hynes; Summer Tanawger John Bomar Jr.

p4: student field trip - Studio Fadeelah

p5: Big Creek- Kayak Family; Prince Edward Point- Zoldguyswalking; Long Point- Lindsay IveBeenBit; yellow bird- Boris Smokrovic

p6: Canada Geese- Channel City Camera Club

p7: Least Bittern - Ethan Gosnell; Chimney Swift - George K. Peck; Bank Swallow - Michael Schramm; Short Eared Owl - Jay Iwasaki;

Peregrine Falcon - Mike Baird; American Badger - Kate Yates; Barn Owl - Sharif Uddin

p8: Blue Jay- Dawn Huczek

p9: Acadian Flycatcher - Félix Uribe; Bald Eagle - Tom Koerner; Barn Swallow- Arend Vermazeren; Little Brown Bat- Ann Froschauer;

Fowler's Toad - Don Freiday

p10: Frog - Crowley

p14: short Eared Owl - Jay Iwasaki

p15: Spongy Moth - Tiia Monto

p16: Buckthorn- Joost J. Bakker; Zebra Mussels - Sam Stukel; Goldfinch - Tanya Jones

p18: Indigo Bunting - Bonnie Taylor Barry

Back cover: Snowy Owl - Ed Robinson; student field trip - Studio Fadeelah



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