

V I T A L I M P A C T S



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# Student Speaker Series



FEATURING

Mireya Mayor





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All website references in this document are consolidated at  
<https://bit.ly/mireyamayormedia>



# Mireya Mayor

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A former NFL cheerleader and daughter of Cuban immigrants, Dr. Mireya Mayor followed her unlikely dreams to explore the world in the name of science. In short order, she became a respected primatologist, audacious explorer, National Science Foundation Fellow, Fulbright Scholar, and an Emmy Award-nominated wildlife correspondent for National Geographic Channel. This mother of six also serves as Director of the Science Communications Initiative at Florida International University, in Miami; redefining what work-life balance might look like.



Mireya's early research focuses on primates, most notably lemurs in Madagascar. As people use more and more of our wild spaces, the lemurs' natural habitat becomes smaller and more fragmented, causing health challenges and population decline. Mireya uses her research and her platform to advocate for habitat preservation and conservation of these amazing primates. As the first female and first Latina wildlife correspondent for National Geographic, she stepped outside of her comfort zone to explore even deeper into the wilderness than she had before, challenging notions of who an explorer could be and what they could look like, earning two Emmy Award nominations for her work.

Join world-renowned scientist and National Geographic explorer Mireya Mayor on a wild and inspiring romp through her unconventional path to success. From her early days as an NFL cheerleader to near-death experiences in the Congo and co-discovering the world's smallest primate in Madagascar, Mireya shares her incredible journey with us. Between field expeditions, on-screen work, and her real-life drama of juggling a family of eight, Mireya reminds us that we are capable of more than we can imagine.

**Visit Mireya's website to learn more about her.**

**(<https://www.mireyamayor.com/about>)**

**Learn even more about Mireya at Changemaker Talent.**

**(<https://www.changemakertalent.com/speakers/mireya-mayor>)**

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Links to all background materials can be found on the reference page at <https://bit.ly/mireyamayormedia>



# Relevant Concepts and Standards

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## Science concepts related to Mireya's content area include:

- Biodiversity, ecosystems, habitat, animal adaptations, land use, conservation, human environmental impact

## 5th-8th grade standards that may be supported by Mireya's content include:

- **5-ESS3-1** - Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.
- **MS-LS2-1** - Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem.
- **MS-LS2-4** - Construct an argument supported by empirical evidence that changes to physical or biological components of an ecosystem affect populations.
- **MS-ESS3-3** - Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.
- **MS-ESS3-4** - Construct an argument supported by evidence for how increases in human population and per-capita consumption of natural resources impact Earth's systems.

# Background Information

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## Articles

### **Trading Pom-Poms For Field Boots: Mireya Mayor's Big Break**

Learn more about Mireya's path to primatology research and her "big break" discovering a new species of mouse lemur.

Hajek, Danny. "Trading Pom-Poms For Field Boots: Mireya Mayor's Big Break." *All Things Considered*, NPR, 3 Jan. 2015, <https://www.npr.org/2015/01/03/374655622/trading-pom-poms-for-field-boots-mireya-mayors-big-break>.

Accessed 16 Oct. 2023.

### **3 New Lemurs Named in Madagascar**

During a wildlife survey in Madagascar, Mireya was part of a research team that discovered a new species of mouse lemur.

Butler, Rhett. "3 New Lemurs Named in Madagascar." *Mongabay*, 21 June 2006, [news.mongabay.com/2006/06/3-new-lemurs-named-in-madagascar/](https://news.mongabay.com/2006/06/3-new-lemurs-named-in-madagascar/).

Accessed 16 Oct. 2023.

### **Meet Dr. Mireya Mayor | Explorer, TV Host & Inspirational Speaker**

Mireya talks about taking risks, exploring the wilderness, and owning what makes her different.

"Meet Dr. Mireya Mayor | Explorer, TV Host & Inspirational Speaker." *Shoutout Miami*, 30 Aug. 2023, [shoutoutmiami.com/meet-dr-mireya-mayor-explorer-tv-host-inspirational-speaker/](https://shoutoutmiami.com/meet-dr-mireya-mayor-explorer-tv-host-inspirational-speaker/).

Accessed 16 Oct. 2023.

## Background Information

## Films and Video

### **Mireya Mayor: A Born Explorer**

Meet Mireya and learn more about what sparked her interest in the natural world.

*Run time: ~4 minutes*

"Mireya Mayor: A Born Explorer." NOVA, PBS,  
[www.pbs.org/wgbh/nova/video/mireya-mayor-a-born-explorer/](http://www.pbs.org/wgbh/nova/video/mireya-mayor-a-born-explorer/).  
Accessed 16 Oct. 2023.

### **30 Second Science: Mireya Mayor**

Mireya is challenged to talk about her work in 30 seconds or less!

*Run time: 30 seconds*

"30 Second Science: Mireya Mayor." NOVA, PBS,  
[www.pbs.org/wgbh/nova/video/30-second-science-mireya-mayor/](http://www.pbs.org/wgbh/nova/video/30-second-science-mireya-mayor/).  
Accessed 16 Oct. 2023.

### **Interview: Mireya Mayor - National Geographic**

Hear from Mireya about channeling her focus and perseverance to overcome obstacles during her many expeditions and how she inspires her children to maybe follow in her footsteps one day.

*Run time: 5 minutes*

Mayor, Mireya. "Interview: Mireya Mayor | National Geographic." *YouTube*, uploaded by National Geographic, 27 Jun. 2011,  
[www.youtube.com/watch?v=Br6-TYm3ZKk](http://www.youtube.com/watch?v=Br6-TYm3ZKk).  
Accessed 16 Oct. 2023.

### **Pink Boots and a Machete - National Geographic**

Mireya tells the story of her winding career path, highlighting her many adventures in the field, going to remote places not many had traveled and having to overcome challenges along the way.

*Run time: 32 minutes*

Mayor, Mireya. "Pink Boots and a Machete | National Geographic." *YouTube*, uploaded by National Geographic, 27 Jun. 2011, <https://www.youtube.com/watch?v=PP0TKHnFG6o>.  
Accessed 16 Oct. 2023.

## Background Information

### Websites

#### **New England Primate Conservancy: Lemurs**

Explore this online encyclopedia of various species of lemurs with detailed descriptions of their distribution, habitat, and more. And dive deeper into primatology with their full collection of primate species profiles

"Lemurs - New England Primate Conservancy." New England Primate Conservancy, 2022, <https://neprimateconservancy.org/lemurs/>. Accessed 16 Oct. 2023.

#### **Lemur Conservation Network**

A network of over 60 conservation organizations working in Madagascar, the Lemur Conservation Network is a hub for information about lemurs, teaching resources, and lemur conservation efforts.

"Home - Lemur Conservation Network." Lemur Conservation Network, 2023, <https://www.lemurconservationnetwork.org/>. Accessed 16 Oct. 2023.

#### **National Geographic: Habitats**

This education collection from National Geographic explores what a habitat is and provides a deep dive into different examples of habitats. Much of Mireya's early research focused on habitat loss and fragmentation in Madagascar and how that impacted lemur communities. Use this collection to explore other connections between organisms and their habitats.

"Habitats and Microhabitats." National Geographic, <https://education.nationalgeographic.org/resource/resource-library-habitats-and-microhabitats/>. Accessed 16 Oct. 2023.

#### **Exploring by the Seat of Your Pants**

Bringing those on the frontlines of science, exploration, conservation, and adventure live into classrooms through virtual guest speakers and field trips.

Home - Exploring by the Seat of Your Pants. 2023, [www.exploringbytheseat.com](http://www.exploringbytheseat.com). Accessed 13 Oct. 2023.

View recordings of their Global Biodiversity Festival presentations.

- **Global Biodiversity Festival Year 4**, Exploring by the Seat of Your Pants, 30 Aug. 2023, [https://www.youtube.com/playlist?list=PLwKFsjZmdxpFfbyVWQ0\\_gCyWoXhGAqY3a](https://www.youtube.com/playlist?list=PLwKFsjZmdxpFfbyVWQ0_gCyWoXhGAqY3a).
- **Global Biodiversity Festival Year 3**, Exploring by the Seat of Your Pants, 24 July. 2022, <https://www.youtube.com/playlist?list=PLwKFsjZmdxpGryUYol9hbrpGZZmBhbO3G>.
- **Global Biodiversity Festival Year 2**, Exploring by the Seat of Your Pants, 20 July. 2023, <https://www.youtube.com/playlist?list=PLwKFsjZmdxpEhK9d-PHhHQqQgdM-2Xay0>.
- **Global Biodiversity Festival Year 1**, Exploring by the Seat of Your Pants, 24 July. 2022, <https://www.youtube.com/playlist?list=PLwKFsjZmdxpGLlfxa9I5IXsmBoDeRMDQ>.

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Videos relevant to Mireya's work include

**Protecting Lemurs Using Community Conservation** **River** (<https://youtu.be/MAKRedC2wkY>),

**Live from the Lemur Forest** (<https://youtu.be/XzXHq4SBFps>),

and **Marvels of Madagascar** (<https://youtu.be/x5gBG179qSg>).

"Home - Exploring by the Seat of Your Pants." Exploring by the Seat of Your Pants, 2023, <https://www.exploringbytheseat.com>. Accessed 16 Oct. 2023.

Razafitsalama, Mamy. "Mamy Razafitsalama | Protecting Lemurs Using Community Conservation." YouTube, uploaded by Exploring By The Seat of Your Pants, 29 May 2021, <https://youtu.be/MAKRedC2wkY>. Accessed 16 Oct. 2023.

Duke Lemur Center. "Duke Lemur Center | Live from the Lemur Forest." YouTube, uploaded by Exploring By The Seat of Your Pants, 1 Jun. 2021, <https://youtu.be/XzXHq4SBFps>. Accessed 16 Oct. 2023.

Steffens, Travis. "Travis Steffens | Marvels of Madagascar." YouTube, uploaded by Exploring By The Seat of Your Pants, 26 May 2020, <https://youtu.be/x5gBG179qSg>. Accessed 16 Oct. 2023.

# Activities

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Check out these activities and lessons to prepare your students for the event.

## Dichotomous Key: A Tool for Identifying Primate Species

(<https://neprimateconservancy.org/dichotomous-key-educators-page/>)

**Target audience: Grades 6-8**

Scientists use dichotomous keys to identify and classify organisms in nature. In this lesson, explore how to use dichotomous keys to scientifically identify nonhuman primate species using observations of their physical appearance.

"Dichotomous Key: Educators Page." New England Primate Conservancy, 2022,  
<https://neprimateconservancy.org/dichotomous-key-educators-page/>. Accessed 16 Oct. 2023.

## PBS: Leaping Lemurs

(<https://www.pbs.org/edens/madagascar/class1.htm>)

**Target Audience: Grades 5-8**

Begin by watching clips of The Living Edens: Madagascar (<https://www.youtube.com/watch?v=VnmICTyKYhs>). The sections from timestamps 1:45-9:18 and 26:28-29:39 give the best introduction to Madagascar, its lemur species, and their impressive leaping behaviors. Follow up with the Leaping Lemurs: How Far Can You Jump? activity to get students moving, collecting data, and comparing their jumping abilities to those of the lemurs.

"Madagascar - A World Apart: Classroom Resources." PBS, Public Broadcasting Service,  
<https://www.pbs.org/edens/madagascar/class1.htm>. Accessed 16 Oct. 2023.

"Madagascar: The Enchanted Island - The Living Edens (1998)." YouTube, uploaded by VHS Therapy, 14 Feb. 2023,  
<https://www.youtube.com/watch?v=VnmICTyKYhs>. Accessed 16 Oct. 2023.

## Mapping Madagascar

**Target Audience: Grades 5-8**

(<https://www.lemurconservationnetwork.org/learn/teaching-resources/>)

Scroll down to the activity "Google Earth Mapping Activity". Use this interactive labeled map with your students to learn more about lemur species and their habitats, as well as Madagascar's people and geography.

"Teaching Resources." Lemur Conservation Network,  
<https://www.lemurconservationnetwork.org/learn/teaching-resources/>. Accessed 16 Oct. 2023.

## Activities

### Relevant Articles to Read and Discuss - Science Journal for Kids (and Teens)

#### **Target audience: Grades 5-8**

The Science Journal for Kids (and Teens) shares current peer-reviewed scientific research adapted for students and their teachers. They create articles written at various learning levels that include vocab lists, discussion questions, additional supporting material, and lesson plan ideas.

One article relevant to Mireya's work is: **Palm oil is everywhere - but where did it come from?**

(<https://www.sciencejournalforkids.org/articles/palm-oil-is-everywhere-but-where-did-it-come-from/>) which explores land use and habitat loss, similar to the habitat conservation work Mireya did with lemurs in Madagascar.

Elitsa. "Palm Oil is Everywhere - But Where Did it Come From?" Science Journal for Kids and Teens, 19 Dec. 2016, <https://www.sciencejournalforkids.org/articles/palm-oil-is-everywhere-but-where-did-it-come-from/>. Accessed 16 Oct. 2023.



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All activity links can be found on the reference page at <https://bit.ly/mireyamayormedia>

**Stay in Touch!**

We would love to hear from you. Visit us on our website at [vitalimpacts.org](https://vitalimpacts.org), follow us on Instagram at [@vital.impacts](https://www.instagram.com/vital.impacts), and email us at [hello@vitalimpacts.org](mailto:hello@vitalimpacts.org) with any questions or ideas!

Did you recently attend a Vital Impacts Student Speaker Series event. Please also let us know what you and your students loved and what we can improve by filling out a brief (5-7 minute) survey at <https://bit.ly/vitalsurvey>