Inclusion for disabled wildlife viewers: A literature review

Freya McGregor, Emily Sinkular, and Ashley Dayer

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Welcome!

Ashley Dayer, PhD
Associate Professor
Project PI

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Research Associate
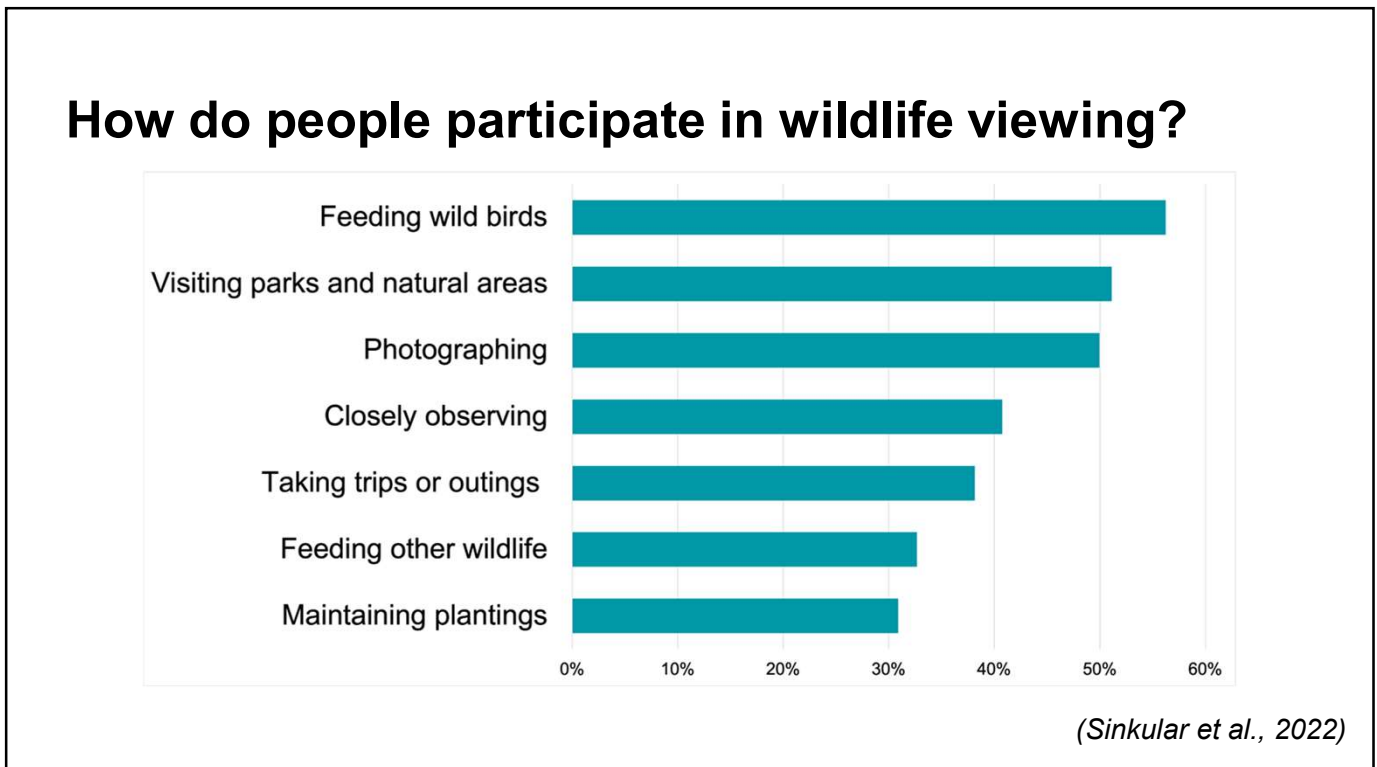Project Co-PI

Emily Sinkular
PhD Student

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What is Wildlife Viewing?

"Closely observing, feeding, and photographing wildlife; visiting parks or natural areas to observe, feed, or photograph wildlife; and maintaining plantings and natural areas for the benefit of wildlife."

(U.S. DOI et al. 2018)

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How do people participate in wildlife viewing?

(Sinkular et al., 2022)

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What types of wildlife do people view?

The majority of respondents were interested in viewing **wild birds (79%)** and/or **land mammals (68%)**.

(Sinkular et al., 2022)

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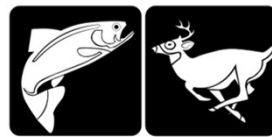## Do wildlife viewers engage in hunting and angling?

29%
only fish and view wildlife

3%
only hunt and view wildlife

14%
fish, hunt, and view wildlife

54%
only view wildlife

(Sinkular et al., 2022)

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How is wildlife viewing impacted by disability?

39%
of wildlife viewers experience accessibility challenges.

(Sinkular et al., 2024)

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Do agencies and organizations need to consider wildlife viewers with disabilities?

Agencies and organizations must ensure that **people with disabilities have equal opportunities** to participate in all programs they offer.

(Americans with Disabilities Act, 1990)

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Inclusion for disabled wildlife viewers: A literature review

By Freya McGregor, Emily Sinkular and Ashley Dayer, Dayer Human Dimensions Lab, Virginia Tech

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Today's presentation

Disability and **inclusion**

Wildlife viewing and **disability**

Best practices for **including** disabled wildlife viewers

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Disability and **inclusion**

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What does it mean to have a disability?

Disability: "A physical or mental impairment that substantially limits one or more major life activities".
May impact someone's:

- Mobility
- Cognition
- Hearing
- Vision
- Ability to live alone, and/or
- Self-care (bathing or dressing).

(ADA National Network, 2023)

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How common is disability in the U.S.?

1 in 4
Americans have a disability.

(Centers for Disease Control, 2020)

1 in 50
Americans have a diagnosed mental health condition.

(Mental Health America, 2022)

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What is the difference between the ADA and inclusion of people with disabilities?

Americans with Disabilities Act, 1990:

- Federal civil rights law to prevent discrimination.
- State/local governments and businesses must comply.
- 2010 ADA Standards for Accessible Design:
  - Covers buildings, parking areas, recreation facilities.
  - Does not cover hiking trails.
    → A trail cannot be "ADA accessible" or "ADA compliant".

(U.S. Department of Justice, 1990; ADA National Network, 2023)

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What is the difference between the ADA and inclusion of people with disabilities?

Inclusion: An active and ongoing effort to **intentionally welcome** and **incorporate** people of diverse backgrounds and life experiences.

- The social and cultural environment: how people interact with each other.
- Just because an entity complies with the ADA does not mean someone with a disability will feel included there.

Photo: Freya McGregor.

(The George Washington University, n.d.)

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To what extent do people with disabilities participate in outdoor recreation?

- Having a disability ≠ not wanting to recreate
- **20% of public lands** recreationists had a family member with a disability
- People **with and without disabilities** are **similarly likely** to view wildlife

(Burns et al., 2023; Burns & Graefe, 2007; Sinkular, et al., 2024; WIlliams et al., 2004)

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Wildlife viewing and disability

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How do wildlife viewers benefit conservation?

Purchasing **products** that **benefit wildlife** or whose proceeds support conservation

Donating money to support conservation

Collecting **data** on **wildlife** or habitat

Enhancing wildlife **habitat**

VOTE

Participating in civic **engagement**

(Cherry, 2018; Cooper et al., 2015; Williams et al., 2021)

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Are there specific benefits of wildlife viewing and outdoor recreation for people with disabilities?

Social connection

Increased problem-solving skills

Reduced symptoms of depression and anxiety

Mental reprieve and calm

(Armstrong et al., 2022; Wilson & Christensen, 2012; Zachor et al., 2017)

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What are the personal barriers to wildlife viewing with a disability?

- Lack of:
  - Time
  - Money
  - Equipment
  - Knowledge of where to go

*Not always within someone's control.

Photo: Patrick Oaks.

(Sinkular et al., 2024; Karns et al., 2023)

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**What are the interpersonal barriers
to wildlife viewing with a disability?**

- Lack of someone to go with
- Lack of other people
  supporting them to go
- Negative attitudes of others
- Crowds
- Safety concerns

(Sinkular et al., 2024; Karns et al., 2023)

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**Lack of accessible features create barriers
to wildlife viewing with a disability**

- Accessible trails
- Information about features
- Obstacles, eg. bollards,
  boulders, gates
- Benches/rest areas
- Accessible bathrooms
- Accessible parking
- Accessible public transport

Photo: Freya McGregor.

*(Darcy, 2006; Dippenaar & Kotze, 2005; Karns et al.,
2023; Mahmoudzadeh & Kourdi Sarjaz, 2018; Schahfer
& Robison, n.d.; Sinkular et al., 2024;)*

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What are the programming barriers to wildlife viewing with a disability?

- Staff lacking an understanding of disability
- Lack of inclusive programming
- Lack of wheelchair accessible tour vehicles
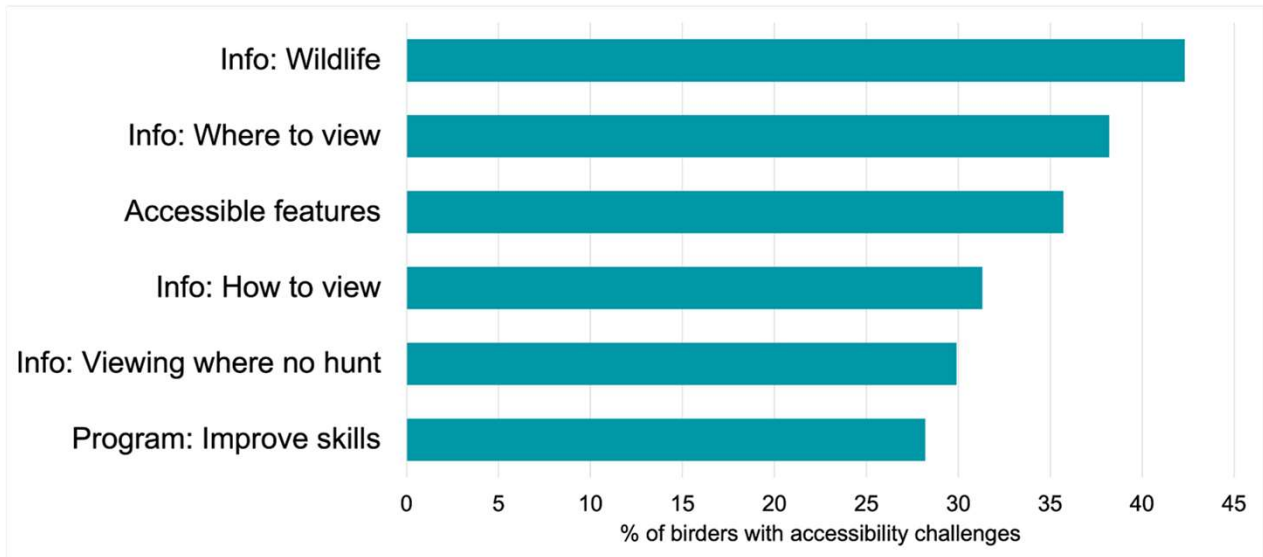- Lack of awareness of the impacts of intersectionality

Photo: Freya McGregor.

(Dippenaar & Kotze, 2005; Ghimire et al., 2014; Green et al., 2009; Karns et al., 2023; Sinkular et al., 2024.)

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Best practices for **including** disabled wildlife viewers
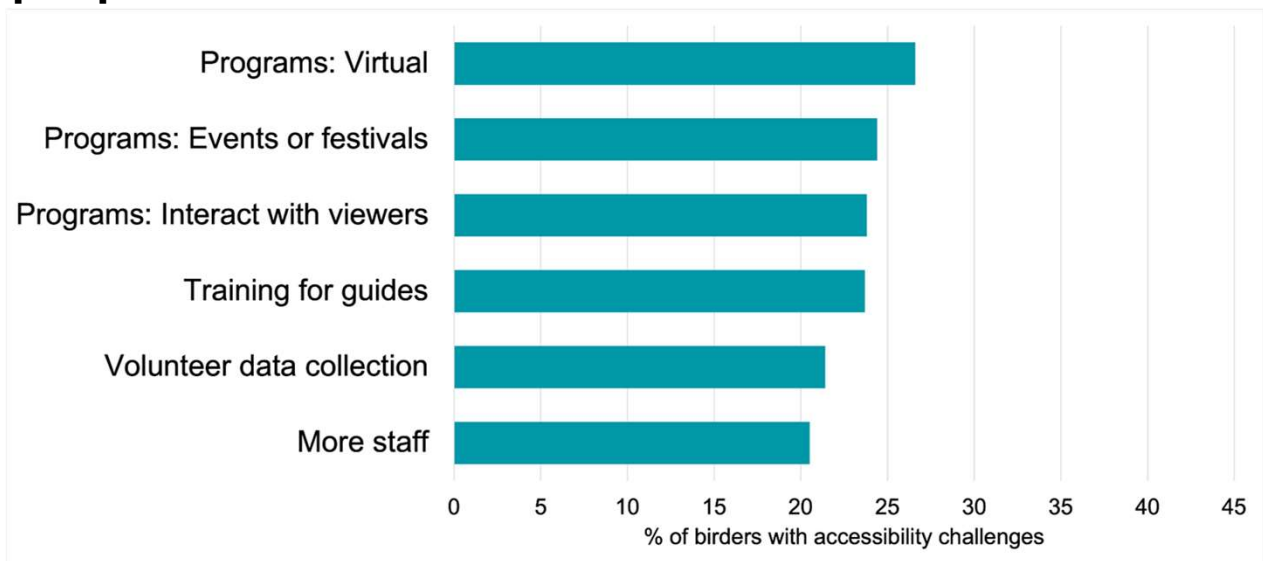
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What would make wildlife viewing more accessible for people with disabilities?

(Sinkular, et al., 2024)

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What would make wildlife viewing more accessible for people with disabilities?

(Sinkular, et al., 2024)

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How should we design trails for people with disabilities?

Various guidelines including:
- Outdoor Developed Areas, United States Access Board, 2014.
- Design Guidelines for Accessible Outdoor Recreation Facilities, Parks Canada, 1994.
- Accessibility Design Standards for all Future Projects, Oregon Parks and Recreation Department, 2023.

Photo: Freya McGregor.

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How should we design trails for people with disabilities?

- Surfaces: Firm, stable and slip-resistant.
- Length: Any.
- Width: 36-48".
- Slope: Up to 5%.
- Cross slope: No steeper than 2%.
- Benches: Every 150-200'.

Photo: Freya McGregor.

(United States Access Board, 2014; Parks Canada, 1994; Oregon Parks and Recreation Department, 2023.)

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What are the best practices for designing accessible interpretive signs?

Various guidelines including:
- 2010 ADA Standards for Accessible Design, Section 703.
- Wayside Exhibits, National Park Service, 2009.
- Design Guidelines for Media Accessibility, Parks Canada, 1994.
- Smithsonian Guidelines for Accessible Exhibition Design, no date.

Photo: Freya McGregor.

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What are the best practices for designing accessible interpretive signs?

Largest font size possible for layout

Main points understood in 45 seconds of reading

Strong contrast between text and background colors
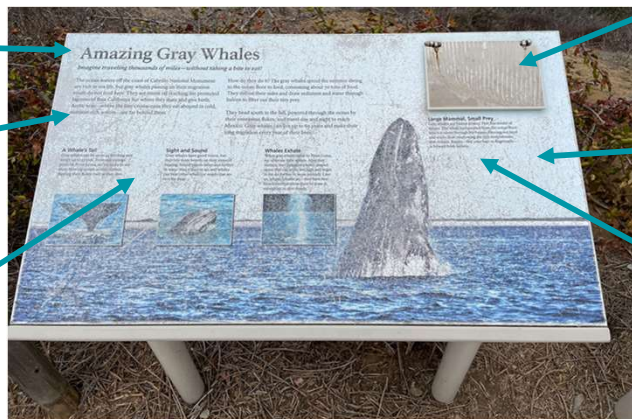
Provide information in alternative formats

Not a white background (it creates glare)

Text left justified

Use plain language

Sans serif fonts

Photo: Freya McGregor.

(ADA Standards for Accessible Design, 2010; National Park Service, 2009 and 2017; Parks Canada, 1994; Smithsonian Institution, no date.)

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How do we best communicate with people with disabilities when marketing programs?

- Use up-to-date disability-related language
- In any written communication use plain language:

• Using headings	• Avoid jargon
• Organize content logically	• Remove unnecessary words
• Write short paragraphs	• Use lists to break up text
• Write short sentences	• Use bold text (not ALL CAPS)
• Choose familiar words	if you need to emphasize

(Federal Plain Language Guidelines, 2011.)

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How do we best communicate with people with disabilities when marketing programs?

- Include disabled wildlife viewers in your marketing materials.
- Explicitly welcome people with disabilities to participate.
- Follow best practices for visual accessibility of any graphics.
- Ensure websites follow the Web Content Accessibility Guidelines.

GO AT YOUR OWN PACE
Many benches dot the trail to provide rest stops along your journey. You will find the distance to the next bench clearly displayed.

WHEELCHAIRS AND STROLLERS WELCOME
This trail is constructed with a hard-packed surface and is six feet wide to allow wheelchairs and strollers to pass one another safely without displacing anyone from their path.

Photo: Freya McGregor.
(Schahfer & Robinson, n.d.)

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How do we best communicate with people with disabilities when marketing programs?

For programs held on trails, include:
- Contact information
- Parking and public transport availability
- Availability of toilets and drinking water
- Trail surface, width, maximum and average gradient and cross slope
- Frequency of benches/resting areas
- Obstacles
- Any other trail users

Photo: Freya McGregor.

(Access Recreation, 2013)

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How do we ensure programs are inclusive for people with disabilities?

Staff and volunteers educated on disability inclusion, including:
- Viewing disabled people as "a normal person"
- Cultural humility
- Disability-related language
- Modifying the program or activity
- Soft skills, e.g. patience

Photo: Renee DePrato.

(Anderson & Heyne, 2000; Chikuta et al., 2018, p.9; Schleien et al., 1997; Armstrong et al., 2022)

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How do we ensure programs are inclusive for people with disabilities?

- Hold wildlife viewing programs at locations:
    - Serviced by public transportation
    - Physically accessible
- Modify wildlife viewing programs by:
    - Building in more breaks
    - Moving at a slower pace
    - Creating stationary viewing opportunities
- Provide accurate information about the

    program's and location's accessibility.

(James et al., 2018; Karns et al., 2023; Schleien et al., 1997; Brown, 2017)

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How do we ensure programs are inclusive for people with disabilities?

- Co-design programs
    → Increased engagement
- Build relationships and then "provide
  conditions so they can grow themselves"
    - Network with disability organizations
    - Develop an advisory board of
      disabled wildlife users

(Charlton, 1998; National Recreation and Park Association, 2018; Sutton-Long et al., 2016; Schleien et al., 1997)

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How can we practice allyship to disabled wildlife viewers?

Allyship: Actively and intentionally **supporting**, uplifting and **advocating** for a person or **group that you do not belong to**, often **using your privilege** to help dismantle systems of oppression and promote social change.

Allyship pushes back against the "poor, tragic disabled people" narrative.

HI FRIENDS
WE ARE HAPPY TO HAVE QUEER AND TRANS PEOPLE WHO WORK HERE, PLEASE BE MINDFUL OF USING GENDERED LANGUAGE LIKE: "SIR" "MA'AM" "MISS" "MAN" "BRO"
IF YOU'RE UNSURE ABOUT SOMEONE'S PRONOUNS USE THEY/THEM OR ASK.
THANK YOU! ☺

Photo: Freya McGregor.

(Kutlaca & Radke, 2022; Wolbring & Lillywhite, 2023.)

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How can organizations practice allyship to disabled wildlife viewers?

- Use up-to-date language around disability.
- Provide accessibility features proactively, not reactively.
- Develop a Code of Conduct on expected behavior. Uphold it.
- Co-design programs with the disability community.
  - Ask how you can support, rather than assuming you know.
  - Share the community's own work, rather than rephrasing it.
- Introduce disability organizations to your networks and resources.
- Learn how to apologize without being defensive.
- Keep learning! Allyship is a journey, not a destination.

(National Recreation and Park Association, 2018; Phillips & Bledsoe, 2021; Sutton-Long et al., 2016.)

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What do we still need to know?

- How many disabled wildlife viewers there are? What kind of wildlife viewing do they engage in?
  - Include a disability-related question in surveys.
- Preferences of disabled wildlife viewers, eg. trail surfaces, design of safety barriers at viewpoints.
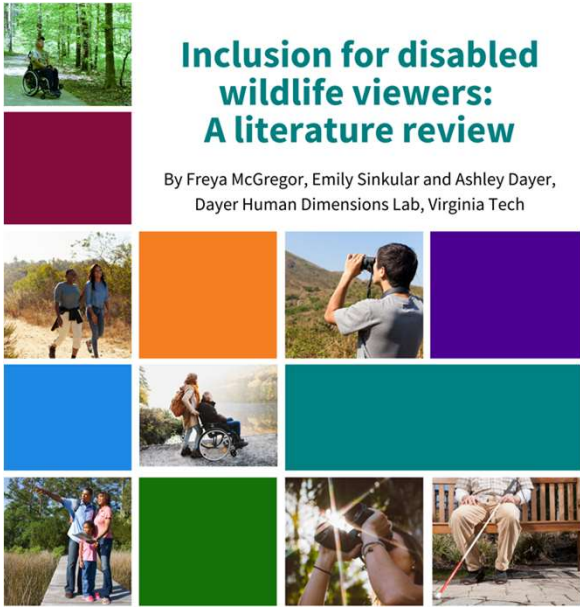- Best practices for designing inclusive programming.

Photo: Freya McGregor.

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What is next?

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Thank you for joining us today!

Questions?

Thank you to our
Steering Committee

- Freya: freyamcgregor@vt.edu
- Emily: sinkular@vt.edu
- Ashley: dayer@vt.edu

See you on May 29!

Want more information?
https://viewing.fishwild.vt.edu/

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