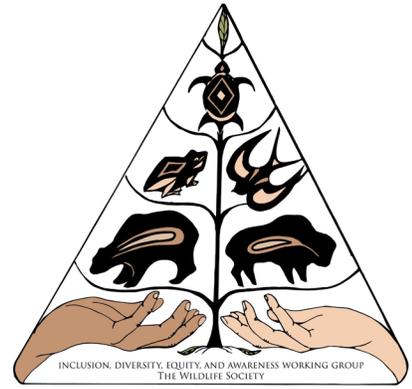# Making Your Presentation and Poster Accessible to a Diverse Audience

Developed by the TWS Inclusion Diversity Equity and Awareness Working Group

This document was first developed by the TWS Inclusion Diversity Equity and Awareness Working Group to share with oral and poster presenters. It is intended to provide guidance for making visual and aural/oral delivery of information more accessible to a diverse audience. Suggestions and tips provided here are in addition to accessibility features that the conference is already making for sign language and closed captioning. This resource is not intended to be comprehensive, but rather, an evolving document. Please send any suggested additions to idea.wg.tws@gmail.com.

👁 Visual Considerations

General suggestions

- Explain figures and visual content and avoid saying "As you can see...". This helps people with cognitive and/or vision disability, as well as people calling in from a phone.
- Ensure figures and text in oral presentations are large enough on each slide to be easily readable even by someone sitting in the back of the room. For posters, ensure readability at approximately 2-3 feet away.
- Avoid flashing visuals.
- Ensure enough contrast between colors (i.e., "luminance contrast") -- this helps people with low vision and color blindness (and makes presentations more visually appealing, too).
  - Between text and background
  - Between colors in figures
  - Tools:
    - https://www.w3.org/WAI/WCAG21/Understanding/contrast-enhanced
    - Contrast grid: https://contrast-grid.eightshapes.com/
- Fonts and text
  - Use non-serif fonts, like Arial and Helvetica. They are easier to read and preferable over serif fonts like Times New Roman.
  - Use a large enough point (i.e., font) size for text.

- Leading, or the spacing between lines of text, should be at minimum 25-30% of the point size.
- Give every slide a unique title -- some people rely on slide titles to navigate, such as when using a screen reader.
- Don't use color as the sole way to define meaning or information. Different sizes, shapes, and shading, are also helpful.
- Manually control animation timing and speed (i.e., don't make animations too fast!).

Color blindness

An estimated one in ten males has some form of color deficiency, which is much higher than in women (aao.org). Red/green is the most common color blindness combination, followed by blue/yellow. Avoid these color combinations. Combining colors, shapes, and or shading can help avoid ambiguity.

- Tools
  - Figures in R: https://www.datanovia.com/en/blog/how-to-stimulate-colorblindness-vision-in-r-figures/
  - Testing color palettes choosing accessible combinations: https://davidmathlogic.com/colorblind/#%23D81B60-%231E88E5-%23FFC107-%23004D40
  - Online simulator for checking images: https://www.color-blindness.com/coblis-color-blindness-simulator/

Alternative (alt) text for images

Alt text ensures images are still accessible to those with visual or cognitive disabilities and provides an alternative if the image cannot be displayed properly. Images require alt text if they convey important information and do not already have a caption.

- https://www.csun.edu/universal-design-center/best-practices-accessible-images
- In PowerPoint, right-click the object itself and select "Edit Alt Text" from the drop-down menu.
- Questions to ask while developing alt text:

  - Is the alt text describing what is in the image?
  - Is the alt text too simple or too generic?
  - Is the alt text 8 to 80 characters long?
  - Does the alt text provide repetitive information?
  - Is the image itself meaningful?

🔊 Audio Considerations

General Suggestions

- It is helpful at the beginning of an oral presentation for the speaker to indicate if there will be closed captioning, transcripts, or sign language available.
- Avoid using too many idioms, acronyms, or jargon.
- Repeat out loud questions that the audience asks, and also type it out in teleconferencing chat/Q & A features.

Recording

- Speak directly into the microphone.
- Record in a room that is ideally isolated from external sounds and does not have hard surfaces such as tile or wood floors.

Delivery

- Speak clearly and slowly, pausing between topics and slides (this also helps close captioning, transcripts, and signing to catch up!).
- Be mindful of how text is read on the slide; ensure that the order of visual presentation matches the order in which you or the audience reads it.
- Presenters should ideally have their video (assuming they have that feature) on so that attendees can see their face or mouth.

Additional Considerations, Tips, and Resources

- If using hashtags, capitalize the first letter of each word (even prepositions) -- this makes hashtags readable by screen readers and certain programs that read alt text.
       Example: #DisabilitiesOutInTheField

- Microsoft has an Accessibility Checker integrated with many of its products that allow the user to check if slides, tables, and images are accessible based on different rules; warnings, errors, and suggestions are provided. https://support.microsoft.com/en-us/office/improve-accessibility-with-the-accessibility-checker-a16f6de0-2f39-4a2b-8bd8-5ad801426c7f

- Visual Designs: https://accessibility.digital.gov/visual-design/getting-started/

- Clear Print Accessibility: https://cnib.ca/sites/default/files/2018-07/CNIB%20Clear%20Print%20Guide.pdf

- Colors, Figures, and Alt Text, and Screen Readers: https://www.stinsondesign.com/blog/ultimate-guide-accessible-presentation-design

- General Presentation Accessibility: https://www.w3.org/WAI/teach-advocate/accessible-presentations/