

Guidelines for Designing Posters

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Posters have become an important mode of presentation at AFS Annual Meetings in recent years, because some topics are best communicated via posters and the number of requests to make oral presentations has far exceeded the available space and time. Thus, the number of posters has increased each year, and this trend will likely continue. Hundreds of posters may be on display, but the time available for meeting attendees

to view them may be limited. When asked about their preferences for poster formats, meeting attendees were strongly in favor of posters that had a minimum of text and could be read in a relatively short time. These observations have prompted AFS to develop these new guidelines, which represent a significant deviation from previously recommended formats.

The purpose of the poster should be to

convey highlights of a study or project in an attractive format that can be easily read and comprehended in a short period of time, i.e., 3 to 5 minutes. The body of the poster will have 300 to 400 words. In contrast, delivery of a 15-minute oral presentation may include 1,500 to 2,000 words, and it would include many more images than could be displayed on a poster. Thus, it is likely that a poster will convey less total information than that in an

Regulation of an Unexploited Brown Trout Population in S

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Objective

Assess relative importance of density dependent and density independent (temperature and discharge) factors on natural mortality, recruitment, and growth.

Study Site

Spruce Creek, central PA, karst geology



Study section: 0.7 km, mean width 12.6 m, 1.4 ha surface area
Annual population estimates (1985-2003) in June
Catch-and-release, barbless hooks regulations since 1985

Environmental Variables

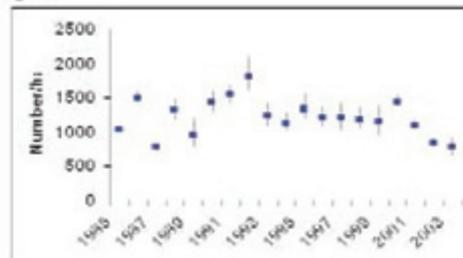
Air temperatures from nearby weather station as surrogate for stream
Daily discharge from adjoining stream as surrogate for Spruce Creek flows
Variables summarized for 5 life stages:
1 NOV-15 DEC — spawning
16 DEC-15 MAR — incubation
16 MAR-15 JUN — emergence, spring growth
16 JUN-15 SEP — summer growth
16 SEP-31 OCT — autumn growth

Population Statistics

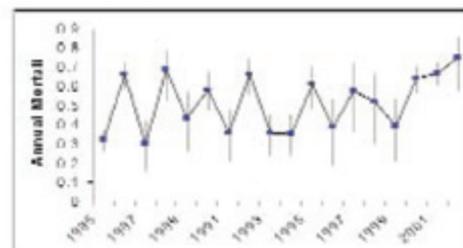
Annual mortality; age-1 fish readily separated from age-2 and older trout
Recruitment; number of age-1 trout in June
Growth; median length of age-1 trout and relative weights

Results

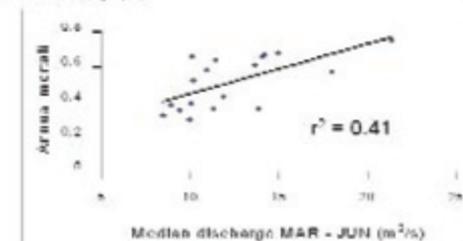
Density of age-1 and older trout averaged ~1,200/ha;
150 kg/ha



Annual mortality averaged 0.51
Represents natural mortality and emigration; hooking mortality assumed negligible



Median discharge in spring accounted for most variation in annual mortality (A)



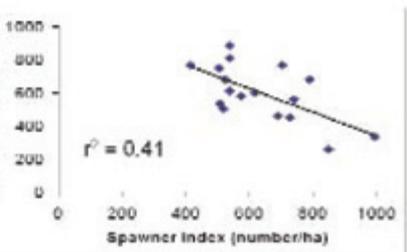
Best model to predict A included MAR-JUN discharge (+) and trout density (+); $R^2 = 0.56$, $P = 0.002$

oral presentation. Efficient use of this limited number of words and images is necessary to convey the highlights of the study.

A key feature of the poster is that it can be easily read at a distance of 2 m. Authors will need to minimize the amount of text in the poster, and to do so, use of bulleted phrases rather than complete sentences is best. Graphs need to be carefully designed so that they are readily comprehended. Details should be kept to a minimum. Photographs and color should be used to enhance the attractiveness of the poster and to entice the audience to stop and read it.

Spruce Creek, PA
Research Unit,

Recruitment (R) was density dependent



Model to predict recruitment included spawner index (-) and discharge during spawning period (+), $R^2 = 0.52$



no single variable significantly related to median length of age-1 trout
length of age-1 trout best predicted by discharge JUN (+) and density of yearlings (-) present during cohort's growing season; $R^2 = 0.37$, $P = 0.03$
weights of trout < or > 200 mm not related to any population statistic or environmental variable

Conclusions

mortality, including emigration, largely responsible for population regulation
mortality inversely related to spawner density
mortality not important in population regulation
mortality during different life stages influenced mortality and recruitment

ELEMENTS OF THE POSTER

Title:

- The title should be short and fit across top of poster on one line.
- Authors' names and affiliations appear below the title.

Abstract:

- This section is optional.
 - *See below for additional information.

Introduction:

- Keep this section short.
- Limit it to a few statements.
- Clearly state the objectives.

Methods or Experimental Design:

- Keep text to a minimum.
- Use graphics where possible.

Results:

- This section should take up most of the space.
- Graphs (figures) are preferred over tables.
- Keep graphs simple.
- Include captions with graphics.
- Include credits on photographs taken by someone other than the authors.
- Tables should not exceed four columns.
- Keep statements brief.

Conclusions or Implications:

- Limit this section to a few bulleted statements.

References:

- This section is rarely included.

Acknowledgments:

- Include this section when appropriate.

*Abstract Option:

A 200-word abstract in 28-point font will require 10% of the available space. Authors may decide that this space could be more effectively used for other material. Rather than require authors to include an abstract on the poster, this section is optional. If authors decide not to include an abstract on the poster, they should be sure to clearly state key items such as objectives and conclusions. Authors must provide the abstract as a handout at the poster location if the abstract is not included on the poster. Authors might also consider including a black-and-white (or color) reproduction of the poster on this same handout.

DESIGN SPECIFICATIONS

Overall size:

- The typical size of a poster is 91 cm x 112 cm (36" x 44") in a landscape or portrait format, but be sure to adhere to instructions from organizers of the specific meeting because their display boards may be better suited for posters of a different size.

Column arrangement:

- A 3-column format best fits this size poster in landscape format.
- The flow of material should be from top to bottom of each column and left to right among columns.
- Deviations from this pattern require careful planning.
- Leave 3.8 cm (1.5") between columns.

Highlighting the sections:

- One can use thin-lined borders around sections or blocks of subsections to emphasize how items are grouped.
- Light-colored background fill can also be used to highlight different sections.

Photograph backgrounds:

- Use of photographs as backgrounds is not recommended, because legibility is usually compromised.
- Text boxes with a background fill can be superimposed on photographs.
- Text printed directly on photographs should be avoided.

Background:

- Light pastel backgrounds are attractive and allow use of contrasting type colors, such as black, dark blue, and red.
- White backgrounds are acceptable, though they are less attractive than colored ones.

Font type and size

- Sans serif typefaces such as Arial are best for good visibility at a distance; use the same font type throughout.
- Title—72 point or larger; keep it short, not more than 80 characters including spaces.
- Authors' names and affiliations—48 point.
- Section headings—36 point, bold.
- Text—28 point.
- Graphs and tables—all numbers and labels 28 point or larger.
- Graph bars and symbols—use colors; avoid cross hatching.
- Acknowledgments—20 to 24 point.

Portraits of Authors

- Authors are encouraged to insert their pictures in the upper right corner of the title line. These portraits will assist poster viewers to find you, should they want to discuss your work. ☺