2001 NSS Convention
A Cave Odyssey
July 23-27, 2001
Mount Vernon, Kentucky

Program Guide

Editor
H.J. Kalmitz

Individual authors retain their copyrights as indicated in the text. By a resolution of the Board of Governors of the NSS, neither this guidebook nor any major portions of it will ever be reprinted, nor are any of these guidebooks to be sold, given, or distributed except through the NSS Bookstore. All rights reserved. No part of this work may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or any datastorage or retrieval system without the express written permission of the National Speleological Society, Inc.

All drawings and maps are used with the permission of the artists. Unauthorized use is strictly prohibited.

NATIONAL SPELEOLOGICAL SOCIETY, INC.
DEDICATED TO THE EXPLORATION, STUDY, AND CONSERVATION OF CAVES

John Apgar's Work
copyrighted 2001, All Rights Reserved
Spelean History Session

Thursday 9:00 - 12:00 noon

Scientists prefer them blind: a historiography of hypogean fish research

Aldemaro Romero
Environmental Studies Program and Department of Biology,
Macalester College,
1600 Grand Ave.,
St. Paul, MN 55105-1899, U.S.A.
romero@macalester.edu

The history of hypogean fish research has been strongly influenced by neo-Lamarckism (including orthogenesis) and typological thinking. Only in the last few decades neo-Darwinism has made any inroads in the research approach to this subject. The majority of the most distinguished and productive hypogean fish researchers have used their research subjects to confirm their own views on evolution rather than to use those subjects as a spring of knowledge to enrich mainstream biological thought. Of these views, I found that the most pervasive of all is the notion of evolutionary 'progress' that has led many researchers to envision hypogean fishes as prime examples of 'regressive' evolution. I propose that the utilization of hypogean fish for the study of convergent evolution should catapult these subjects of research into prime objects of evolutionary studies.

Nuclear Fallout Shelters in Mammoth Cave National Park

Colleen O'Connor Olson
Mammoth Cave National Park
P.O. Box 7
Mammoth Cave, KY 42127
rick_olson@nps.com

Between 1963 and 1978 Mammoth Cave National Park had four Civil Defense nuclear fallout shelters in the Mammoth Cave System and Great Onyx Cave. Supplies included food, water, a medical kit, sanitary supplies and devices to check radiation. Though Mammoth and Great Onyx Caves probably would have been as accessible and safe as other fallout shelters, usually basements in homes or public buildings, caves in general would not be as suitable for fallout shelters. Most caves are not in highly populated areas, do not have roads leading to them and lack easy access entrances. A well-ventilated cave could let fallout in, while a cave with little ventilation could be unsafe for large groups over long periods of time, and the cool temperature of most American caves would be uncomfortable for inactive people. After 15 years in the cave, the shelter supplies were removed, not always with care. The water was poured out of the barrels before removing them from the caves, washing away sediment and leaving gullies in the floor in Mammoth Cave's Audubon Avenue. Workers destroyed gypsum flowers in Crystal Cave. Most of the supplies were disposed of, but the carbohydrate supplement candy, 13 years old and "hard as rocks," was given to National Park Service employees to eat. The Office of Civil Defense no longer exists and fallout shelters are no longer common. The Mammoth Cave fallout shelters are no longer a survival strategy, but an interesting chapter in Mammoth Cave history.

Caves as Curiosities: The Location of Cultural Values within American Caves in the Nineteenth-Century

Joseph C. Douglas
645 Brookhollow Rd.
Nashville, Tenn. 37205

During the nineteenth century, one way Americans conceived of caves as natural curiosities, interesting spaces that were expressions of the sublime. Americans located spiritual, religious, romantic, and patriotic cultural values within caves, giving them an importance beyond their utilitarian and commercial worth. By attaching these values to caves, Americans created ambiguous and contradictory interactions with the cave environment, reflecting differing impulses towards the natural world. The tension between commercial and utilitarian exploitation of caves and the cultural values of caves was an important factor in the nascent efforts to conserve the cave environment in the period.