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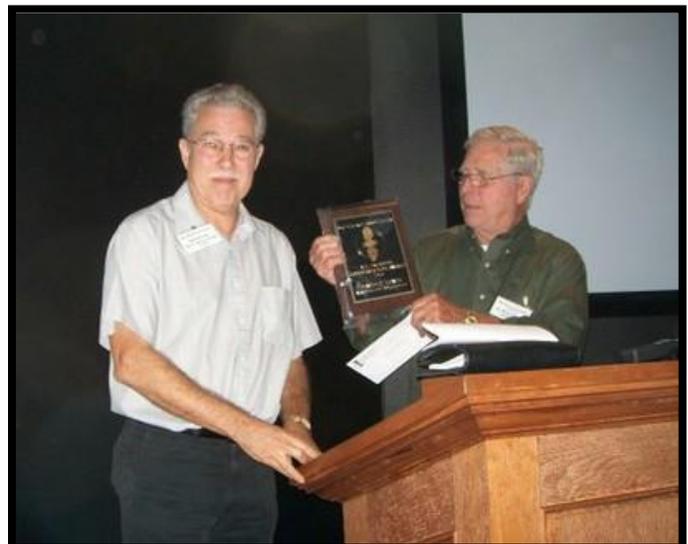
David Lewis, Taxonomic Working Inventory  
Group Leader for Mycology-Mushrooms

### **David Lewis: Mycology in the Big Thicket and New Records**

David Lewis, Taxonomic Working Inventory Group Leader for Mycology-Mushrooms, reported 2010 data for research conducted in the Lance Rosier, Turkey Creek, Menard Creek Corridor, and Canyonlands Units of the Big Thicket National Preserve (BTNP). In total 242 collections and observations were made and include 128 different taxa determined to species and 40 collections in need of further investigation.

At least 14 species were new records for the BTNP and almost 19 species were state records. Three species are new to science. New records include: *Boletus innixus*, *Crepidotus crocophyllus*, *Gymnopilus liquiritiae*, *Laccaria obiensis*, *Leucoagaricus brunnescens*, *Mitrula lunulatospora*, and *Russula amoenolens*. Collections will be housed at the Field Museum in Chicago, Illinois, at the Tracey Herbarium in College Station and in the BTNP Field Research Station in Saratoga.

**David Lewis was the recipient of the Big Thicket Association's 2010 R.E. Jackson Conservation Award.**



**New to State: Macro Fungi-TWiG Leader: David Lewis, President of Gulf States Mycological Society by Thicket of Diversity on Monday, June 11, 2012**

***Boletus roodyi***

**B.Ortiz, D.P. Lewis & Both (2009)**

New for West Virginia, Arkansas, and Texas



*Boletus roodyi* (2009)

A new species for east Texas and found in the Big Thicket National Preserve. It is a species of the Bolete family and is named after Bill Roodyi.

*Hygrocybe chameleon* (2007)



One of the most interesting new records for the preserve (and Texas) is *H. chameleon* described by Bill Cibula from southern Mississippi in 1979.

*Hygrocybe chameleon*-Side View



*Hygrocybe chameleon*-Top and Underside

We knew it should occur in east Texas but did not find it until June 2007.

## 2012 Mushroom Adventures

On June 8<sup>th</sup>, David Lewis of Newton, Texas provided an overview on mushrooms at the Logon Café. Using photographs he explained the varieties, their methods of reproduction, favorite habitats and those that were poisonous or edible. Lewis cooperates with a team of experts from across the country through the Gulf States Mycological Society. Identification of mushrooms can be challenging because under one estimate only 5% of the world's mushrooms have been identified. Scientific literature from the 19<sup>th</sup> Century must be reviewed and DNA studied when exploring un-described or potentially new species. Lewis knows. In the Big Thicket as a TWIG leader (Taxonomic Working Inventory Group) of the Thicket of Diversity All Taxa Biodiversity Inventory, Lewis has identified 190 new mushrooms to the National Preserve, 99 new to Texas and 25+ new species to Science. For his efforts, Lewis is internationally known and even has 3 mushrooms named after him.

On Saturday, June 9, Lewis conducted a Mushroom Walk in the Lance Rosier Unit. Approximately 30 volunteers participated. Leta Parker of the Big Thicket National Preserve shared guidelines on collection permits required by the National Park Service. It is forbidden to collect specimens unless a permit has been acquired by a reputable scientist or educational institution. Mushrooms collected during Saturday's inventory were under Lewis' permit.



Armed with a basket, paper bags, a small digging tool and insect repellent, the Citizen Scientist volunteers along with the mushroom experts caravanned to the Big Thicket National Preserve's Lance Rosier Unit to the fringes of a swamp. The experience was unique as no trails existed and one explored the lush terrain amid the cypress knees to hunt for mushrooms.

Mycologists: Jay Justice of Alexander, Arkansas, David Lewis, Pat Lewis

On return to Saratoga's Field Research Station all specimens were grouped, identified and labeled in an amazingly short period of time. At least 35 species of macro fungi were collected and 2 species of slime molds. Then one heard, "He is going to talk, He is going to talk!" All congregated around the table to hear an analysis of the morning's collections. A most chilling find was the discovery of the most poisonous **destroying angel**, an all-white mushroom in the genus [\*Amanita\*](#). It can be confused by the untrained eye with other edible fungi and is deadly.

The weekend's activities with mushrooms were delightfully enlightening. The foray into the forest provided a glimpse of rare Big Thicket treasures often hidden and rekindled the marvel for the natural resources found in our backyard.