Texas Gulf Coast Fern Society

January 2005 **Vol. 7, No. 1**

http://www.rwsarchitects.com/fern.htm

Next Regular Meeting: Sunday, January 16 at 2:00 p. m. – Houston Garden Center in Hermann Park, 1500 Hermann Drive, Houston, TX 77044 – Phone: (713) 529-3960

A message from our President:

Hello, everyone.
I wish I could start this off with "Happy New Year" but, feel I must first mention the loss of a dear friend, Kathy McMillan. For those who had not gotten to know Kathy, she had a ready smile, a roll-up-her-sleeves attitude and a zest for life. She had been our past Society Secretary, helped with our sales efforts, served on past nominating committees and remained very active with the Society, even while fighting her health battle. She was just fun, and genuinely nice. She will be missed by everyone who knew her. Our heart and prayers go out to John and their family.

Our Society starts this year off with a good core group of people, and adequate money for the year. We do however need to increase our membership some. So we will need to organize some membership drives and as these unfold I will be asking for help from each of you. Any ideas or opportunities you may have heard of, will be most welcome.
I will be setting up a couple of committees and will go over them at our January meeting.
Martha Burg has already lined up some great speakers for this year and we have a field trip planned for March. We should have a lot of fun and learn a few new things this year.
In meetings last year we decided not to participate in the Home and Garden show in 2005, so we are not getting ready for a February sale.
I look forward to the challenges of serving as your president and hope to see you soon,
Darla

We thank Judy and Leon Smith for hosting our December Christmas Party at their lovely home once again. Many thanks to everyone for bringing all the wonderful food – we have some great cooks in our group! A great time was had by all and like last year, we had a fun gift exchange.

Larry Rucker extends a special thanks to all who supported the "Star of Hope Mission" with their generous donations.

Officers for 2005:

President:	Darla Harris
Vice President:	Martha Burg
Secretary:	Patsy Geiger
Treasurer:	Al and Susan Peacock
Board Members at Large:	Ted Richardson and Cecil Strange

Committees:

Membership Chair:	Leon Smith
Newsletter:	Paul Geiger
Library:	Patrick Hudnall

DUES ARE DUE

We're sure many members have paid their dues for 2005, but just in case you haven't – please don't forget.

Membership dues:

Individual:	$10.00
Family:	$15.00
Student:	$5.00

Our Treasurer will be available to collect them at the next meeting or you may mail your payment to:
Leon Smith
5606 Longmont Drive
Houston, TX 77056-2345

Please make your checks payable to Texas Gulf Coast Fern Society or simply TGCFS.

WELCOME NEW MEMBER

Please welcome the following new member to our family of Fern Enthusiasts and make note on your roster:

Jack G. Walker
14555 Philippine #1117
Houston, TX 77040

His special interest is Platyceriums

OUR NEXT GUEST SPEAKER – January 16, 2005

Martha Burg announces that our guest speaker for this month is **Angela Chandler**. Ms. Chandler is an outstanding contributor to horticultural education and was awarded the title **STATE MASTER GARDENER – 2004** for the state of Texas – a truly high honor. The topic of her presentation will be: "Water Smarts and Propagation."

UPCOMING EVENT:

Our speaker for the February meeting will be Grant Stephenson, owner of Horticultural Consultants. Mr. Grant will speak on growing palms, cycads and bamboo. He direct-ships most of his stock, serving mainly institutions such as Moody Gardens, various zoos and botanical gardens, but keeps some stock on hand at his facility just south of the astrodome on Bellfort at Hwy 288. Check out his web site at:
http://www.horticulturalconsultants.com/about/bio.html

The following is taken from "Fiddle Forum," American Fern Society, Cindy Johnson-Groh, Editor, Kenneth A. Wilson, Column Editor, March-April 2001. Sorry, no pretty pictures.

Quote:

Have I Found a Hybrid?

Whether in the field, garden, or greenhouse, noting an unusual or different fern is a pastime of anyone interested in plants. Professional field botanists make their living looking for such finds, but fern enthusiasts can be just as ardent in this pursuit. Novel ferns may be new species, hybrids or more often, variations of a known species.

Once an unusual plant is found, how does the finder know if it is a hybrid? Some people have the innate ability to spot hybrids. Generally these people are familiar with the appearance of the ferns in their area and they hone their eyes to spot anything different. They search colonies of related species for the unusual and since new hybrids may have the ability to adapt to habitats other than their parents', they comb through different habitats as well. Sowing spores of different species together intentionally produces hybrids and knowing what the sporelings of the parents look like makes it easier to spot potential young hybrids. The following criteria are guidelines to identifying hybrids.

1. Hybrids have characteristics of both parents in their form or structure.

Savvy field people spot intermediate frond shapes as their first signal of a possible hybrid. They will look for possible parents and compare them to the putative hybrid. A hand lens may disclose more detailed structures that are intermediate or a mixture of characters of the two parent species. Basic structures to examine include the type and construction of hairs or scales, veneration pattern, vascular bundle pattern in the stipe, structure of the sori and indusia, etc.

2. Hybrids produce irregularly-shaped fronds

In many hybrids, the left and right sides of some fronds are not the same, which gives those fronds a "lop-sided" appearance. This is because some lobes may resemble those of one parent or the other, and still others may be intermediate to both parents. A lop-sided look is particularly common when the fronds of each parent differ in blade cut, such as when one parent has simple entire fronds and the other pinnate fronds.

3. Hybrids are sterile.

In most hybrids, irregular-pairing of the chromosomes during meiosis (the process that precedes spore formation) results in sterility. The spores that are produced, when examined under 40X or 100 X magnifications, will show various distorted shapes. These malformed spores will not germinate.

Most hybrids meet these three criteria, but there are enough exceptions to complicate the task of conclusively establishing hybridity. Hybridity is difficult to establish if the presumed parents are similar or if the presumed hybrid doesn't fit the criteria of a hybrid. For instance, some hybrids may look more like one parent that the other; some have symmetrical fronds; and some may bear fertile spores.

If doubt exists about a plant being a hybrid there are various laboratory tests that may help confirm hybridity. A thorough study and comparison of the form and structure (morphology) of the parents and presumed hybrid is usually the first laboratory test. Detailed differences may be revealed that were overlooked in the field.

Examining chromosome number, behavior and structure is a second standard test. Chemicals (isoenzymes) and the RNA or DNA may also be examined. Some times one or two tests will be conclusive, but the more tests that are administered, the greater the reliability in determining if the plant is a hybrid or a variety of a species.

In summary, hybrids are typically intermediate between their two parents in form and structure. The blade may be intermediate between the two parents or be a mixture of each parent's characteristics, resulting in an irregular or asymmetrical frond shape. Typically, the spores of hybrid ferns are distorted and non-viable. Exceptions to these criteria occur which require laboratory tests to determine hybridity. These may include examination of the morphology, chromosomes, isoenzymes and RNA or DNA.

-Barbara Joe Hoshizaki

Unquote.