

SOUTHEASTERN BIOLOGY



Volume 60

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Number 1

ASB

REVISED CALL FOR PAPERS FOR THE 74TH MEETING

ASB

ASB

Marshall University, Huntington, WV
April 10-13, 2013

ASB

ASB

Meeting Site: Charleston Civic Center
Charleston, West Virginia

ASB

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Science Building

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All contributions, inquiries about missing back numbers and other matters should be addressed to the Journal Editor. News items should be sent to the News Editor. Send books to be reviewed to the Book Review Editor.

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PURPOSE

The purpose of this association shall be to promote the advancement of biology as a science by encouraging research, the imparting of knowledge, the application of knowledge to the solution of biological problems, and the preservation of biological resources. The ASB has representation in Section G Committee of the AAAS. Varying types of membership are available to individuals and institutions. See inside back cover.

TIME AND PLACE OF FUTURE MEETINGS

2013 April 10-13: Hosted by Marshall University, Huntington, WV. Meeting site is the Charleston Civic Center, Charleston, WV.
2014 April 2-5: Spartanburg, SC. Meeting site TBA.

REVISED CALL FOR PAPERS

THE 74th ANNUAL MEETING OF THE ASSOCIATION OF SOUTHEASTERN BIOLOGISTS

Hosted by:

Marshall University, Huntington, WV

**ABSTRACTS WILL BE ACCEPTED
UNTIL *FRIDAY, 1 FEBRUARY 2013***

Instructions for Submitting an Abstract for the Spring 2013 ASB Meetings in Charleston, WV

Abstracts should be submitted using the abstract submission form. The web address for this is: <https://survey.appstate.edu/TakeSurvey.aspx?SurveyID=ASB>

This year, you can use special characters in the title, abstract and your name. For the title and abstract, there is a menu from which you can select various special characters (similar to what is in WORD). Please use these to insert these characters into your abstract or title. If you need special characters in your name, please follow the instructions on the abstract submission form (it is slightly different due to technical details we won't delve into here).

Abstracts must be 250 words or less, which is approximately 2,000 characters. The abstract submission program will automatically format the abstract for you, so you don't have to worry about superscripting for linking people to their addresses.

Addresses should include only the following: Department, Institution, City, State. See instructions on the submission form online.

If an author appears on multiple abstracts (either on several from one lab group, or on presentations from different institutions), please make sure that their name is spelled out exactly the same. Otherwise, our indexing routine will recognize them as different people. So, for example, if Thomas H. Huxley is how the name appears on one abstract, but as T.H. Huxley on another, that will show up in the index as two different people.

Once you complete the submission form and send it in, you should receive an automated email reply with all of your information that you submitted. Please check this, and if there are any errors, please contact the program chair, Dr. Howard S. Neufeld at email: neufeldhs@appstate.edu, or by phone at 828-262-2683.



Marshall University

is proud to host the

**74th Annual Meeting of the
Association of Southeastern Biologists
April 10-13, 2013, Charleston, WV
Charleston Civic Center**

This four-day event brings together approximately 1000 biologists from across the southeastern United States. The meeting features a distinguished plenary speaker, special symposia, field trips, oral and poster presentations, workshops, networking and social events, and more.

The Annual Meeting provides you with the exclusive opportunity to showcase your products and/or services to this large and important audience of faculty, students, researchers, conservation workers, military and government personnel, and business professionals with a common interest in biological issues. Interests are diverse, and range from genetics and molecular biology, to physiology and population biology, to community and ecosystem ecology and systematics.

Charleston Civic Center



Hip, Historic....Almost Heaven!

- 66% of the US population within 500 miles
- 5-minute drive to Yeager Airport & complimentary shuttle to/from hotel
- Easy access via 3 major Interstates (I-64, I-77, I-79)
- Short drive from the best whitewater rafting in the US
- \$1 city-wide trolley ride
- Charleston Town Center Mall-over 130 stores
- Walking, charming, the eclectic East End...one of the most diverse downtown areas with local flair, restaurants and nightclubs
- Clay Center for the Arts & Sciences
- A 293 foot, 23.5 Karat gold capitol dome and is 5 feet taller than the US capitol
- Casino open 24/7

Join Us for the 74th Annual Meeting of ASB!

About ASB: The Association of Southeastern Biologists (ASB) was established in 1937 by biologists concerned with the quality of biological research in the southeastern United States. Today, ASB is the largest regional biology association in the country, and is committed to the advancement of biology as a science by the promotion of science education, research, and the application of scientific knowledge to human problems.

ASB Web Site: Many thanks to Dr. Ashley Morris, Middle Tennessee State University, for maintaining ASB's web site. Please visit our exciting and interactive web site www.sebiologists.org Many new features have been added, register on-line for our Annual Meeting, join or renew your membership, view photos, inquire about career opportunities and more.

Marshall University

History

Marshall University was founded in 1837 as a private [subscription school](#) by residents of Guyandotte and the surrounding area. The landmark [Old Main](#), which now serves as the primary administrative building for the university, was

built on land known as Maple Grove, at the time the home of the Mount Hebron Church in what was then the [state of Virginia](#). [John Laidley](#), a local [attorney](#), hosted the meeting which led to the founding of Marshall Academy, which was named after Laidley's friend, the eminent [John Marshall](#) who had served as the fourth [Chief Justice of the United States](#) from January 1801 to July 1835.

On March 30, 1838, the institution was formally dedicated by the [Virginia General Assembly](#) as Marshall Academy; however, this institution was not a college level institution as that was understood at that time. In 1858, the [Virginia General Assembly](#) changed the name to Marshall College. This change still did not reflect its status as a true college. The [Civil War](#) closed the often financially challenged school for much of the 1860s.



[Old Main](#) is the oldest building on campus and home to many of the university's administrative offices.



Marshall University's [John Deaver Drinko Library](#), which opened in 1998.

On June 20, 1863, [Cabell County, Virginia](#), was one of the [50 counties](#) separated from Virginia at the height of the [American Civil War](#) to form the State of [West Virginia](#), and the college fell within the new state. In 1867, the [West Virginia Legislature](#) resurrected the institution as a teacher training facility and renamed it State Normal School of Marshall College. This began the history of the college as a state-supported post-secondary institution.

More About the University

Marshall University is a [coeducational public research university](#) in [Huntington, West Virginia, United States](#) founded in 1837, and named after [John Marshall](#), the fourth [Chief Justice of the United States](#).

The university is composed of eight undergraduate colleges and schools: the College of Liberal Arts (COLA), the College of Fine Arts (COFA), the College of Education and Human Services (COEHS), the College of Information Technology and Engineering (CITE), the Elizabeth McDowell Lewis College of Business (LCOB), the College of Science (COS), the College of Health Professions (COHP), and the W. Page Pitt School of Journalism and Mass Communications (SOJMC), and four graduate colleges, the general Graduate College, the Graduate School of Education and Professional Development, the School of Pharmacy, and the [Joan C. Edwards School of Medicine](#), a regional center for cancer research which has a national reputation for its programs in rural health care delivery. The [forensic science graduate program](#) is one of a small number of post-graduate-level academic programs in the United States accredited by the [American Academy of Forensic Sciences](#) and considered by many to be an acceptable Forensic Science program in the United States. The University's digital forensics program is the first program in the world to receive accreditation in digital forensics from the Forensic Science Education Programs Accreditation Commission (FEPAC). The Elizabeth McDowell Lewis College of Business has achieved AACSB accreditation.

Marshall University has a non-residential branch campus, focused on graduate education, in [South Charleston](#), the [Marshall University - South Charleston Campus](#), which also offers classes throughout the southern half of the state, including at the [Erma Byrd Higher Education Center](#) in [Beckley](#). It also offers undergraduate courses, under three "centers", the Southern Mountain Center, operating on the campuses of the [Southern West Virginia Community College](#) in [Logan](#) and [Williamson](#) and at the [YMCA](#) in [Gilbert](#); the Mid-Ohio Valley Center in [Point Pleasant](#) and the Teays Valley Center in [Hurricane](#). Marshall University also operates the Robert C. Byrd Institute, with operations on both the Huntington and South Charleston campuses, as well as in [Fairmont, West Virginia](#), and [Rocket Center, West Virginia](#). The goal of the Institute is the transfer of technology from the academic departments to private industry to support job development in the region.

20th Century

With the exception of the Old Main building, expansion of the facilities and the college itself did not begin until 1907, when the West Virginia Board of Regents changed the title of the presiding officer from "principal" to "president" and allowed the creation of new college-level departments. At that time, enrollment surpassed 1,000 students. The school began offering four-year degrees for the first time in 1920.

In 1937, the college suffered through a devastating flooding by the [Ohio River](#). Numerous structures, such as Northcott Hall and the James E. Morrow Library were extensively flooded. Much of Huntington was also heavily damaged,

and as a result, a [floodwall](#) was constructed around much of the town to prevent future occurrences.

The West Virginia [Board of Education](#) authorized Marshall College in 1938 to offer the master's degree in six programs: [chemistry](#), [education](#), [history](#), [political science](#), [psychology](#), and [sociology](#), as the institution underwent another expansion. In that year the school was accredited as a "university level institution"; however, elevation to university status would remain a contentious political issue for decades to come. Further expansion accelerated after World War II.

In 1960, [John F. Kennedy](#) spoke at the college during his cross-country campaign for the presidency.

On March 2, 1961, West Virginia Legislature finally elevated Marshall to university status, and the legislation was signed by Governor [W. W. Barron](#).¹ The student newspaper, The Parthenon, prepared two front pages for the day, depending on the outcome of the legislature's vote. Also in 1961, [WMUL-FM](#) began operations as the first public radio station in West Virginia. The station, which began in the Science Building at 10 [watts](#) of power, now broadcasts from the Communications Building with 1,150 watts.

In 1969, the university's athletic program, facing a number of scandals, fired both its [football](#) and basketball coaches and was suspended from the [Mid-American Conference](#) and from the [National Collegiate Athletic Association](#). The university rebuilt its athletic program back to respectability, and in 1977, the university joined the [Southern Conference](#).

Academics

The scholarship and achievements of Marshall's faculty are also bringing more attention to the University. Dr. [Jackie Agesa](#) and Dr. [Richard Agesa](#) are among the top 20 [black](#) economists in the nation. Dr. [Jean Edward Smith](#), known for his works *Grant* and *John Marshall: Definer of a Nation*, was a finalist for the [Pulitzer Prize](#) in biography. The Higher Education for [Learning Problems](#) (H.E.L.P.) program founded by Dr. Barbara Guyer assists students with learning disabilities and related disorders complete their college education.

Marshall offers two prestigious and academically rigorous scholarship programs: the [John Marshall Scholars](#) and the [Society of Yeager Scholars](#) program.

The University maintains major involvement in the arts of the surrounding [Appalachian](#) region. The Joan C. Edwards Performing Arts center is a state-of-the-art, 530-seat facility for studies in the fields of music, art, and theatre. The Jomie Jazz Center is a \$2.6 million facility that houses the University's study program in [jazz](#).

In April 2007, the Marshall's Joan C. Edwards School of Medicine was ranked fifth in the nation in producing family physicians, according to the Accreditation Council for Graduate Medical Education.

In 2005, Marshall alum and [Chicago Tribune](#) reporter [Julia Keller](#) won the [Pulitzer Prize for Feature Writing](#). [CNN White House](#) correspondent [Joe Johns](#) also is a Marshall alum.

In 2009, Marshall's Forensic Science Graduate Program ranked #1 in the nation based upon scores on the Forensic Science Assessment Test (FSAT), which is a qualifying test offered by the American Board of Criminalistics.

In 2011, Marshall's Digital Forensics Program was the first program in the world to obtain full accreditation in digital forensics from the Forensic Science Education Programs Accreditation Commission (FEPAC).

The school's general engineering program was closed in 1970, but was reborn with a graduate program in 1993, and a general engineering undergraduate program in 2006. MU also allows students to complete the first two years of a specific engineering degree and then transfer to one of the two campuses of West Virginia University. MU has a goal of developing specific engineering programs of its own.

MU has granted the Master's degree since 1938. Building on the School of Medicine, the school began granting other doctoral degrees in 1994. Previously students would complete work at Marshall, but the degrees would be awarded by West Virginia University. MU now offers a PhD in Biomedical Sciences, an EdD in two specialties, and first professional doctorates in Nurse Anesthesia, Psychology, and Physical Therapy.

The university has added a Pharmacy School, starting in 2012, with first class graduating in 2016.

You will have an unforgettable experience in Charleston at the Annual ASB Meeting April 10-13, 2013. Don't miss it!

PROGRAM, PAPERS & ABSTRACTS

You must attend and present your paper/poster to be published in the July issue of SEB. Please visit the ASB web site for the latest listing of papers and posters for the Asheville meeting! www.sebiologists.org

The Abstract Deadline is Friday, 1 February 2013.

For questions concerning posters and paper submissions, please contact the program chair, Dr. Howard S. Neufeld at email: neufeldhs@appstate.edu, or by phone at 828-262-2683.

Commercial Workshops/Special Sessions

Commercial Workshops/Special Sessions will also be available for all registered attendees! These workshops presented by exhibitors will allow you to learn about the latest tips from the experts. The fee for each workshop will be \$10, and you may register to attend one or more workshops during the Annual ASB Meeting. To register, and to read about the workshop descriptions, go to <http://www.sebiologists.org> and review the descriptions on the registration pages. Space is limited and you must pre-register for them, so don't delay! All workshops will be held at the Charleston Civic Center.



Workshop Form

2013 Association of Southeastern Biologists
April 10-13, 2013 Charleston, WV

Workshop Description: All commercial workshops will be conducted during the meeting on a first-come first-served basis. Classroom style seating will be provided at no additional charge to the presenter. Each classroom will be set for a minimum of 50 participants. A screen, laptop and LCD Projector will be provided for each room. **One workshop per application please. Please complete the entire form! Only full exhibiting companies are permitted to present commercial workshops. Please contact Scott Jewell, A2ZConvention@gmail.com with questions!**

Company/Organization _____

(Please list company name as you wish it to appear on printed materials)

Presenter _____ Email: _____

Contact Address: _____

Telephone: _____ Fax: _____

Web site: _____

Workshop Title: _____

50 Word Workshop Description: _____

Please e-mail description to A2ZConvention@gmail.com

(Description will appear on Web site and Registration Form)

Please indicate which time slot you prefer below:

Pre-Conference Workshop: Wed 4pm-5:30pm _____

Thurs 8:30am-10am _____ Thurs 10:30am-12noon _____ Thurs 1:30pm-3pm _____

Thurs 3:30pm-5pm _____ Fri 8:30am-10am _____

Deadline for workshop submission is 31 January 2013

Hold Harmless Clause

The workshop presenter assumes all responsibility and liability for losses, damages and claims arising out of injury to the presenter's display, equipment and other property brought upon the premises of the convention facilities and shall indemnify and hold harmless the association agents, servants and employees as well as the ASB organization from any losses, damages and claims.

Upon acceptance by ASB, this signed application and Workshop Contract form becomes the contract for the 2013 ASB Annual Convention. Workshop presenter will be notified of their acceptance by letter no later than 15 Feb 2013.

Signature _____

Date _____

Return Workshop Form by **January 31, 2013** to: Scott Jewell, ASB Meeting Coordinator, PO Box 1088, Mebane, NC 27302; A2ZConvention@gmail.com, 336/213-7373 cell, 336/421-0034 office, 336/421-3425 fax.

Silent Auction

ASB will again hold a silent auction next to the exhibitors. All of the proceeds will go towards supporting student travel to the annual meeting. Come look at the items up for bid and help support our presenting students. See page 16 for form.

Social Events

Wednesday Night Mixer: Immediately following the Plenary Session, there will be a social mixer with LIGHT hors d'oeuvres, a cash bar, and live music. The mixer is a long tradition at ASB meetings and is a great time to renew old acquaintances and make new ones. Be sure to sign up for this FREE event on the registration form.

Thursday Night Social “If the Big Boy Is Movin’, Then the Party Is Groovin’”

Some say that a meeting is judged by the success of the Thursday Night Social. We hope to maintain a longstanding tradition of music, dancing, and entertainment that will give you a break from the work of the meeting.

The Social will be held at the Charleston Civic Center. Chris “Chubbs” May and Big Boy Productions will be our host DJ and spinning all your favorite tunes. “Chubbs” has been voted as one of the top 10 DJ’s on the East Coast. He’s not your ordinary DJ, he’s an entertainer that is sure to please everyone! Did someone say dance? Yes, dance music....so bring your dancing shoes for a night of great food, music and networking with friends alike! Interactive, high energy and fun for everyone! You will not want to miss this!

Friday night Awards Banquet: The culmination of the annual meeting is the ASB Awards Banquet, where we honor the accomplishments of members and students. Delicious beef, chicken and vegetarian options are available. Following dinner, awards will be presented. Remember that long speeches are no longer a part of the banquet. (A reminder: those competing for ASB awards must register for and be present at the banquet in order to receive the award.)

Activities for Guests

Attendees and family members will find many interesting places to visit in the Charleston area. Visit the Charleston Web site <http://www.charlestonwv.com/> to learn and inquire more details.

Conference Badges

You will receive your meeting badge when you arrive in Charleston. Simply proceed to the Registration Area at the Charleston Civic Center to receive your badge. Guests of conference participants should ask for guest conference badges at the registration desk. **YOU MUST WEAR YOUR BADGE TO ALL FUNCTIONS, INCLUDING SOCIAL EVENTS!**

ASB Workshop

Vision and Change Leadership Fellows: Transforming Undergraduate Life Sciences

A national effort is underway to transform the way life sciences are taught in this country at the undergraduate level, how academic departments support faculty, and how curricular decisions are made. Come hear more about PULSE (Partnership for Undergraduate Life Sciences Education), a joint initiative of the National Science Foundation, Howard Hughes Medical Institute, and National Institutes of Health. The effort is supporting a yearlong program in which 40 Vision and Change Leadership Fellows consider and then recommend to the greater colleague community models for improving undergraduate life sciences education. Significant contributions from the greater community throughout the yearlong project are needed to develop and implement the framework for systemic change. This session will be facilitated by several Vision and Change Leadership Fellows.

PLENARY SPEAKER**DR. MEREDITH BLACKWELL*****Fungi and Their Associations with Insects***

Meredith Blackwell was born in Abbeville, Louisiana, a small town in the southwestern part of the state. After completion of undergraduate (USL) and graduate (University of Alabama and University of Texas) studies, she spent three years at the University of Florida in Gainesville as a postdoctoral researcher. It was at this time that she first studied minute termite-associated fungi previously described by Roland Thaxter. Her first faculty position was at Hope College, Holland, Michigan (1975-1981) and then LSU (1981-present) where she holds the rank of Boyd Professor.



She has served in a number of offices of the Mycological Society of America including President and has been president of the International Mycological Association. During the 1997-1998 academic year, she served as a program officer for the Systematics Program in Evolutionary Biology at the National Science Foundation. She has been recognized by the Mycological Society of America with awards including the Distinguished Mycologist Award and the William H. Weston Teaching Award. She is a fellow of the Mycological Society of America, the British Mycological Society, and the American Academy of Arts and Sciences.

Her current research focuses on associations between fungi and arthropods. Important collaborators have been Robert L. Gilbertson, David Malloch, Joseph Spatafora, Sung-Oui Suh, Ning Zhang, and Hector Urbina. In a major undertaking with graduate school colleague, Charles Mims, she collaborated on the fourth edition of *Introductory Mycology* in 1996 (C. J. Alexopoulos, C. W. Mims, and M. Blackwell); the first edition of this textbook had been published by her major professor Alexopoulos in 1952. The fourth edition has been translated into German, Spanish, Portuguese, Chinese, and Farsi.

We welcome Dr. Blackwell to the 74th annual meeting of the Association of Southeastern Biologists.

Annual Meeting Registration Information

ONLINE REGISTRATION WILL OPEN February 1, 2013

A downloadable and printable registration form will be available online www.sebiologists.org on Feb 1, 2013 for those who desire to mail in or fax their registration form. Online Registration will close on April 1st, 2013. We encourage everyone to register early and save money. ASB offers 3 options for registration: 1) On-line @ www.sebiologists.org; 2) US Mail sent to A2Z Convention Services, PO Box 1088 Mebane, NC 27302; 3) Fax the form directly to A2Z Convention Services 336-421-3425. Mail in registration must be postmarked by April 1, 2013. After April 1, 2013 postmark, you will be charged on-site registration pricing, no exceptions!

For Assistance with Registration, please contact
A2Z Convention Services, LLC
Phone: 336-421-0034 or cell 336-213-7373; Fax: 336-421-3425
A2ZConvention@gmail.com

Attendee Registration Fees

(Pre-Registration will be available Feb. 1, 2013 for both online and mail-in)
 (Standard Registration will begin 12:01am, Feb. 28, 2013)

General Registration	Early Rate	Standard Rate	On-Site Rate
Regular	\$290	\$325	\$360
Student	\$165	\$190	\$205
ASB Member Discounts			
ASB Regular Member	\$215	\$250	\$285
ASB Student Member	\$120	\$145	\$160
ASB Patron Member	Included with membership		
ASB Emeritus Member	\$215	\$250	\$285
Guest	\$25	\$30	\$35

Student Volunteers

Student Volunteer: A Special E-mail will be sent in Jan. 2013 for student volunteers. Applications for this will be on a first-come, first-served basis. You will not be allowed to substitute your time slot. If you cannot fulfill your volunteer hours, you will be required to pay for your registration.

Please Note: We are holding Registration Fees at the 2012 Athens, Georgia rate!

ASB 2013 Charleston, WV- Hotel Information

Please use the ASB approved list and sponsoring hotel for regular & student attendees and exhibitors. Please call either hotel directly to make your reservations. ASB will receive exclusive benefits for using the ASB sponsored hotel(s).

Headquarters Hotel for Regular Attendees and Exhibitors**EMBASSY SUITES HOTEL CHARLESTON, WV****300 Court Street, Charleston, WV 25301 (304) 347-8700**

The Embassy Suites is our Headquarters Hotel and the Holiday Inn Express is reserved for student housing. The Embassy Suites is conveniently located 2 blocks from the Charleston Civic Center. ASB will provide free daily shuttle service to/from the Charleston Civic Center or you make take the short walk along the street or walk inside the two-story shopping center. Park your car at the hotel and leave it until the end of the convention. You can pay your daily parking fee at check-in. Use the free ASB sponsored daily shuttle for your convenience. A shuttle schedule will be printed in the On-Site Program. All conference events will be held at The Charleston Civic Center. Please remember to ask for the special ASB Group Rate (code: ASB) when making reservations. The approved hotels are providing additional services to accommodate ASB. Please make your reservations as soon as possible. The Embassy Suites is our Headquarters Hotel and has been secured for Exhibitors and ASB attendees. There is a daily parking fee at the Embassy Suites for personal vehicles and vans. Please visit their web site for directions to their property or use your (GPS).

LAST DAY TO RESERVE A ROOM AT DISCOUNTED RATE IS **5pm 3/09/2013**.

Occupancy Rate: Single \$144, Double \$144, Triple \$154, Quad \$164

Free wireless internet access in the lobby/restaurants, free internet in the business center, on site spa, on site fitness and indoor swimming pool, free full made-to-order breakfast, free manager's reception every evening and free limited parking (also a paid parking deck).

ASB Student Housing**The Holiday Inn Express Charleston Civic Center****100 Civic Center Drive, Charleston, WV 25301 (304) 345-0600**

The Holiday Inn Express is reserved for student housing and is located directly across the street from the main entrance to the Charleston Civic Center. Parking is free. All conference events will be held at The Charleston Civic Center. Please remember to ask for the special ASB Group Rate (code: ASB) when making reservations. The following hotels are providing additional services to accommodate ASB. Please make your reservations as soon as possible. The Holiday Inn Express has been secured for students. Please visit their web site for directions to their property or use your (GPS).

LAST DAY TO RESERVE A ROOM AT DISCOUNTED RATE IS **5pm 3/09/2013**.

Occupancy Rate: Single \$119, Double \$119, Triple \$119, Quad \$119

Enjoy free high speed Internet and WiFi, fitness center and cozy Great Room for relaxing or TV watching. Satisfy your cravings for flavor and social atmosphere with a great complimentary hot breakfast buffet with the world's best warm cinnamon rolls!

GETTING TO CHARLESTON IS EASY

Please visit these two web sites for the most current information on Charleston, WV: <http://www.cityofcharleston.org/>; [HTTP://WWW.CHARLESTONWV.COM/](http://WWW.CHARLESTONWV.COM/)

- 5-minute drive to Yeager Airport & complimentary shuttle to/from hotels
- Easy access via 3 major Interstates (I-64, I-77, I-79)



Industry Partners Form

2013 Association of Southeastern Biologists April 10-13, 2013 Charleston, WV

 Yes I Would Like To Partner With ASB And Participate
In the Industry Partners Program!!

Send no money now. Please complete form and return to address shown below.

Company/Organization _____
(Please list company name as you wish it to appear on printed materials)

Representative: _____ Email _____

Address: _____

City, State, Zip: _____

Telephone: _____ Fax: _____

*Special Recognition at the Thursday Night Social, Friday Night Awards Banquet, signage at the Convention Center and a listing in Final Program of Southeastern Biology!

Qty	Item	Amount
_____	Wed Night Cash Bar (4 Opportunities)	\$500/opportunity
_____	Coffee Breaks (8 Opportunities)	\$500/opportunity
_____	Cyber Café & Marketing Survey	\$750/opportunity
_____	Thurs Night Social (4 Opportunities)	\$900/opportunity
_____	Fri Night Banquet Cash Bar	\$850
_____	Yes I wish to present a workshop	See Workshop Form
_____	24 Hour Exhibit Hall Security	\$1,000
_____	ASB Executive Committee Breakfast	\$350
_____	Yes I would like to Donate an Item to the Silent Auction to help with Student Travel	See Silent Auction Form
_____	ASB Web Site Hot Link to Your Company (12 months)	\$375

Signature _____ Date _____

Title _____ e-mail _____

Return Form With Check or Credit Card Information by **March 15, 2013** to: Scott Jewell, ASB Meeting Coordinator, PO Box 1088, Mebane, NC 27302; A2Zconvention@gmail.com, 336/213-7373 cell, 336/421-0034 office, 336/421-3425 fax.



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Ad Sizes

¼ Page Ad	1½" x 1"
½ Page Ad	3" x 2"
Full Page Ad	7½" x 4 ¾"

Paid with check # _____ on Date _____ Rec'd by: _____

2013 Meeting Information

15



ADVERTISING ORDER FORM

_____ Ad in all 4 issues of Southeastern Biology (check choice)

_____ ¼ page = \$200, _____ ½ page = \$325, _____ full page = \$425

_____ Ad in Final On Site Program (check choice)

_____ ¼ page = \$175, _____ ½ page = \$225, _____ full page = \$275

*All ads are black and white and must be submitted in pdf.
All ads will be posted on the NEW ASB Web Site!

Signature _____

Date _____

Title _____

phone _____

e-mail _____

____ Visa ____ MasterCard ____ Discover ____ AMX ____ Check

CC# _____ Exp ____/____ 3 digit code on back of credit card ____/____/____

Name As It Appears On Card _____

Credit Card Billing Address

*Last Name _____ *First Name _____

*Company/Organization _____

*Address _____

*Line 2 _____

*City _____ *State _____ *Postal Code _____

*Phone _____

Return form with check or credit card information to: Scott Jewell, ASB Meeting Coordinator, PO Box 1088, Mebane, NC 27302; A2ZConvention@gmail.com, 336/213-7373 cell, 336/421-0034 office, 336/421-3425 fax.

id with check # _____ on Date _____ Rec'd by: _____



Silent Auction

_____ **Yes**, I would like to contribute to the Silent Auction to help with student travel to the Annual Meeting. (100% of all proceeds to benefit student travel.)

Partial List of Items Donated at the 2009 Annual Meeting.

- | | |
|---------------------------------|--------------------|
| Dissection Set | Charts |
| Corporate Gift Certificates | Wine Gift Basket |
| Frog Model | Educational Charts |
| Dinner for Two | Microscope |
| Two Nights Hotel Accommodations | Books |

Description of item(s) to be donated:

Please check appropriate option:

_____ Please contact me at the convention to pick up donation.

_____ I will mail donation to Scott Jewell, ASB Meeting Planner, before March 15, 2013.

Signature	Date	phone
<hr/>		
Title	e-mail	

Return form by **March 15, 2013** to: Scott Jewell, ASB Meeting Planner, PO Box 1088, Mebane, NC 27302; A2Zconvention@gmail.com, 336/213-7373 cell, 336/421-0034 office, 336/421-3425 fax.

Affiliate Organizations Meeting with ASB, April 10-13, 2013

The following affiliate societies will be in attendance at the 2013 Annual Meeting. We anticipate an excellent diversity of paper and poster presentations. The societies and their contacts are listed below.

**American Society of
Ichthyologists
and Herpetologists,
Southeastern Division**

Dr. Greg Fulling

e-mail: gfulling@geo-marine.com

Website: <http://www.asih.org>

**Ecological Society of America
Southeastern Chapter**

Dr. Kimberly J. Bolyard

Dept. Biology, Bridgewater College
Bridgewater, VA 22812

(540) 828-5427; fax (540) 828-5661

e-mail: kbolyard@bridgewater.edu

**Beta Beta Beta
Southeastern District I**

Dr. Don H. Roush

UNA, Biology

P. O. Box 5181

Florence, AL 35632

(256) 765-4435

e-mail: dhroush@una.edu

Society of Herbarium Curators

Dr. Michael Vincent

Department of Botany

Miami University

77 Upham Hall

Oxford, OH, 45056

(513)-529-2755

e-mail: vincenma@muohio.edu

**Beta Beta Beta
Southeastern District II**

Dr. Christi Magrath

Dept. of Biological & Env. Sci.

Troy University

Troy, AL 36082

(334) 670-3622

e-mail: cmagrath@troy.edu

**Society of Wetland Scientists
South Atlantic Chapter**

Dr. David Bailey

U.S. Army Corps of Engineers

CE-SAW-RG-L; 69 Darlington Ave.

Washington, DC 28403-1343

(901) 251-4469

email: David.E.Bailey2@usace.army.mil

**Botanical Society of America
Southeastern Section**

Dr. Zack Murrell

Department of Biology

Appalachian State University

Boone, NC 28608

(828) 262-2674

e-mail: murrellze@appstate.edu

**Southern Appalachian Botanical
Society**

Dr. Wendy B. Zomlefer

Department of Plant Biology

University of Georgia

Athens, GA 30602-7271

(706) 583-0389; fax (706) 542-1804

e-mail: wendy.zomlefer@uga.edu

**Southeastern Society of
Parasitologists**

Dr. Vince Connors

Secretary-Treasurer; Dept. Biology

University of South Carolina Upstate

800 University Way

Spartanburg, SC 29303

(864) 503-5780

e-mail: vconnors@uscupstate.edu

Southeastern Fishes Council

Dr. Henry Bart

Tulane Museum of Natural History

Tulane University

Belle Chasse, LA 70037

(504) 394-1771; fax (504) 394-5045

e-mail: hank@museum.tulane.edu

**National Association of Biology
Teachers**

Lisa Walker, Director of Conventions

e-mail: lwalker@nabt.org

SPECIAL REMINDERS FROM THE JOURNAL EDITOR

ASB BANQUET ATTENDANCE

Please keep in mind that recipients of ASB awards must be present at the annual ASB banquet to receive the award. Therefore, all applicants for ASB awards must attend the banquet to insure the presence of the winners.

MEMBERSHIP AND REGISTRATION UPDATE

All applicants for ASB research awards must be ASB members in good standing, and be duly registered for the annual meeting. If necessary, check with the Treasurer for verification before you apply.

Please make sure your membership status is up-to-date amply before the deadline for abstract submission and for annual meeting registration. Please be aware that mailing a check or money order for membership renewal to the treasurer and then trying to register online or by mail for the annual meeting on the same day does not work. Moreover, trying to pay for membership renewal online in tandem with registering for the annual meeting online does not work well either.

EXTRA ABSTRACT SUBMISSION

Besides sending abstracts of papers and posters to the Program Committee by February 1, 2013, anyone wishing to be considered for an award must send an abstract to the respective award committee chairperson in order to be considered. An abstract must be sent to the chairperson by February 1, 2013.

Preliminary Presentation Instructions

Oral presentations are allotted 15 minutes and must be in PowerPoint format on a USB memory drive. **Posters** should fit in a 46" x 46" space and will be displayed for an entire day (Thursday or Friday). Presenters should be prepared to stand with their posters for a designated one-hour period.

If you have any questions, please contact **Program Chair, Howard Neufeld**, neufeldhs@appstate.edu.

ANNOUNCEMENT**Judges sought for Georgia's Science and Engineering Fair state finals March 22, 2013**

The Georgia Science and Engineering Fair is seeking volunteer judges to evaluate the research of Georgia's top middle and high-school students at the state finals in Athens on March 22, 2013.

The fair will be greatly expanded this year—750 students are expected to advance from their regional competitions to the state competition. Judging is on Friday, March 22, 2013 at the Classic Center in downtown Athens, Georgia.

This is an uncompensated volunteer activity, and an excellent opportunity to engage with some of the brightest young minds in the state. Snacks, lunch, and bottomless coffee are included. Judges are not required to be Georgia residents.

The volunteer form is available here: [Judge Volunteer Form](#). Detailed descriptions of judge responsibilities are on page two of the form. Additional information about the fair is at www.georgiacenter.uga.edu/gsef, or contact oasp@georgiacenter.uga.edu.

Christine Burgoyne

Director, Georgia Science and Engineering Fairs &
Office of Academic Special Programs (OASP)

The University of Georgia

Center for Continuing Education Suite 192

Departmental phone: 706-542-3537

Direct line: 706-542-6473

Fax: 706-542-7537

www.georgiacenter.uga.edu/gsef

GSEF 2013 will be March 21-23, 2013

GSEF 2014 will be March 27-29, 2014

GSEF 2015 will be March 26-28, 2015

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THE ASSOCIATION OF SOUTHEASTERN BIOLOGISTS

PROPOSED CHANGES IN THE BYLAWS AND CONSTITUTION APPROVED BY THE EC AT THE INTERIM MEETING SEPTEMBER 22, 2012, AT CONCORD, NORTH CAROLINA

VOTING WILL BE CONDUCTED AT THE ANNUAL BUSINESS MEETING.

The Archives — J. M. Herr Jr.

Office of the Archivist

Proposal to the Membership — That the position of Archivist be replaced with a new entity designated as the Archives Office.

The Archives Office would consist of three people, viz., the Archivist, Associate Archivist, and Assistant Archivist.

The term of office for the Archivist would be two years. At the end of the term, the Associate Archivist would become the Archivist, and the Assistant Archivist would become the Associate Archivist.

At the close of the Archivist's term, he or she may have the option to remain in the Archives Office as Assistant Archivist provided that the President and Executive Committee offer a reappointment. Otherwise, the President with concurrence of the Executive Committee would appoint a replacement from the ASB membership.

In the event that the Archivist leaves the office before the end of the two-year term, then the Associate Archivist would immediately become the Archivist and the Assistant Archivist would become the Associate Archivist. The President and Executive Committee would then appoint a new Assistant Archivist from the ASB membership.

Rationale — The office of Archivist has always been a difficult one to fill because (1) carrying out the responsibility requires more time and effort than that required by some committee chairs, and (2) as with all offices in the Association, credit for

the services rendered are not accorded much value by the administration of the Archivist's home institution. Presently, if the Archivist suddenly leaves the office, the President of the Association must quickly appoint a replacement who must immediately assume the responsibilities of the office whilst studying and learning just what those responsibilities are, and at the same time become acquainted with personnel at the Hargrett Special Collections Library at the University of Georgia with whom he or she must interact. The greatest value of the Archives Office plan is that it allows each Archivist under normal circumstances to have a four-year preparation period for carrying out the responsibilities of the office. In addition, the President's appointment task would obviously become easier. To convince an ASB member to enter the process of learning the duties of the Archivist would be easier than finding someone to assume archival duties immediately upon accepting the appointment.

ASB Bylaws

Present Reading

Article VI - Executive Committee

Section 3. The Executive Committee shall appoint an Archivist who shall be custodian of the permanent records or archives and, with the approval of the Executive Committee, make appropriate arrangements for the collection, care, and maintenance of such records. The Archivist shall serve a term of 3 years and shall be eligible for reappointment for successive 3-year terms.

Section 4.

Section 5.

Section 6.

Proposed Revision

Section 3. The President with approval of the Executive Committee shall establish an Archives Office consisting of an Archivist, Associate Archivist, and Assistant Archivist each serving a 2-year term. At the close of the Archivist's term, the Associate Archivist assumes that position and the Assistant becomes the Associate Archivist. The President and Executive Committee can reappoint the former Archivist to the position of Assistant Archivist or appoint someone from the membership to fill that position.

Section 4. The Archives Office shall be custodian of the permanent records or archives and, with the approval of the Executive Committee, make appropriate arrangements for the collection, care, and maintenance of such records.

Sections 4., 5., 6. Changed to Sections 5., 6., 7.

ASB Constitution

Present Reading

Article IX - Archives

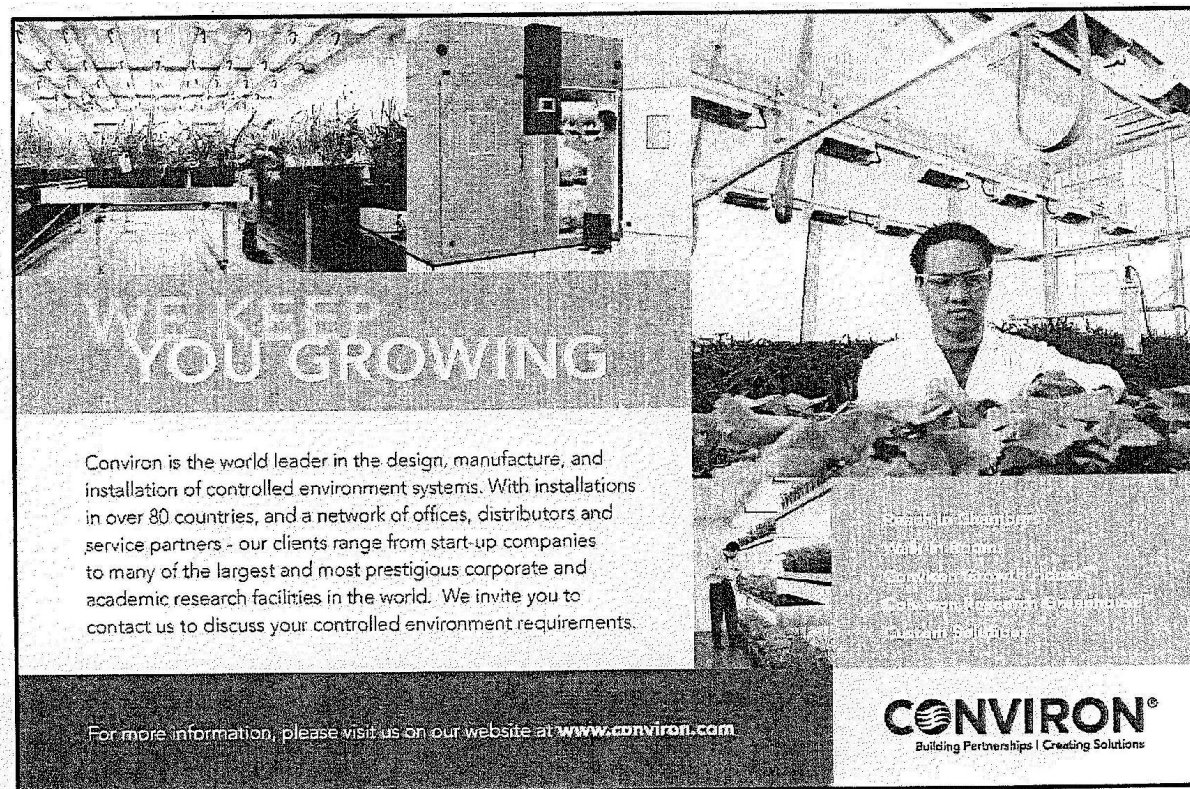
The Archives of The Association of Southeastern Biologists shall be maintained permanently at the University of Georgia, Athens, Georgia.

Proposed Change

Article IX - Archives

Section 1. Documents to be archived shall be collected by the Archives Office consisting of an Archivist, Associate Archivist, and Assistant Archivist. The Archivist shall serve a 2-year term and may at the President's discretion, and Executive Committee's concurrence, be reappointed as Assistant Archivist as the present Assistant assumes the office of Associate Archivist and the present Associate becomes the Archivist.

Section 2. The Archives of The Association of Southeastern Biologists shall be maintained permanently at the University of Georgia, Athens, Georgia.



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**ASSOCIATION OF SOUTHEASTERN BIOLOGISTS
EXECUTIVE COMMITTEE MEETING
WEDNESDAY, 4 APRIL 2012
ATHENS, GEORGIA**

ATTENDANCE: 15 individuals attended the meeting

NAME	CAPACITY
Don Roush	President
Zack Murrell	Vice President
Patricia Cox	Past President
Conley McMullen	Secretary
Tim Atkinson	Treasurer
Terry Richardson	Membership Officer
John Herr	Archivist
Joey Shaw	EC Member-at-Large
Ashley Morris	EC Member-at-Large
Roland Roberts	EC Member-at-Large
Christi Magrath	Tri-Beta Representative
James Caponetti	Journal Editor
Scott Jewell	Meetings Coordinator
Nicole Welch	Program Committee Chair
Joerg-Henner Lotze	Publisher

I. Call to Order and Welcome – President Don Roush called the meeting to order at 1:47 P.M., welcomed the Executive Committee (EC) members and guests, and thanked everyone for attending.

II. Approval of the Executive Committee Meeting Minutes from 1 October 2011

Motion 1. Ashley Morris made a motion that the minutes from the 1 October 2011 EC meeting in Chattanooga, TN be approved as written. Zack Murrell seconded the motion. There was no discussion. The motion carried.

III. Officers and Executive Committee Reports

A) President (Don Roush) – As I conclude my first year as President of ASB, I continue many of the initiatives started by Past President Patricia Cox. The final adoption of SENA as a member benefit was implemented with the change now appearing on the membership application. This was completed with the able assistance of the treasurer, membership officer and SEB editor. After charging the publication committee, progress on the second ASB journal continues toward final name and editorial board composition. I have contributed a presidential “view from here” article for two issues of SEB.

In his further comments, Don emphasized the importance of teamwork in the future success of the Society.

B) President Elect – Vacant

- C) Past President (Patricia Cox) – During my first year as Past President, I was chair of the Nominating and Resolutions committees. I also advised the President, Don Roush, when needed and assisted the Program Committee prepare the on-site program for the 75th Anniversary meeting. This year, I volunteered to organize the silent auction with the help of past ASB officers, Eloise Carter, Bonnie Kelley, Diane Nelson, Pat Parr and Kim Tolson. I also provided a Past-President's message for SEB.

In her follow-up comments, Patricia emphasized how well the silent auction was shaping up for this year, and stated that there have been many very nice contributions. President Don Roush complimented Patricia and the auction committee for doing such a fine job.

- D) Vice President (Zack Murrell) – Zack recruited Dave Schimel (NEON) as a plenary speaker for this year's meeting. Zack also invited the Lucretia Herr Outstanding Biology Teacher Award winner, William Schuyler to the meeting and, with the aid of Scott Jewell, arranged travel and housing for the Plenary speaker and LHOBT awardee. Zack has worked with Archivist John Herr and the EC to provide several activities to highlight the ASB 75th anniversary. Zack also invited the Patrons to the Patron's Breakfast and will host that meeting. Finally, Zack also assisted in development of the Program.

Zack mentioned that he had acquired over 400 photos for use in the 75th Anniversary celebration. Zack also informed everyone that the Patron's breakfast will be held Friday morning at 7:00 A.M. Discussion followed. Past President Patricia Cox suggested that the photos might be best exhibited outside of the meeting rooms on Thursday and Friday. President Don Roush expressed appreciation to Zack for putting together the displays for the Anniversary.

- E) Secretary (Conley K. McMullen) – I began my second year as Secretary of ASB at the Spring EC Meeting held Wednesday, 15 April 2011 in Huntsville, AL. Since that time, I have worked with President Don Roush on a variety of ASB matters and communications, including the minutes from the EC meetings in April (Wednesday and Saturday), the ASB Business Meeting in April, and the Interim EC Meeting in October. In preparation for the 2012 meetings, I coordinated submission of the 2011-2012 Officer Reports, Appointed Position Reports, and Committee Chair Reports; and I made 25 copies of each of these reports for circulation at this year's EC meeting. I also prepared certificates for outgoing Officers and Committee Chairs.
- F) Treasurer, Business Manager (Tim Atkinson) – Tim gave a brief report on the financial situation of ASB. At the end of fiscal year 2011 (31 December 2011), the Association showed a net increase of \$28,385, with an ending balance of \$56,555. The Enrichment Fund increased by

\$3,925, primarily due to the Claudia Jolls Challenge. The ending balance for the Enrichment Fund was \$32,095.

Tim reported that last year's meeting in Huntsville, AL, was profitable, but we had other bills to pay including software bills, etc. Discussion followed. As of today, the Enrichment Fund totaled \$37,410. This resulted in large part from Scott Jewell providing opportunities for members to contribute online. Also, as of today, the ASB account is \$158,800. It appears that ASB will come out of this year's meeting in good shape.

- G) Enrichment Fund Board Chair (Mike Dennis) – Mike monitored the activities of the Enrichment Fund during the past year. This included coordination with ASB Treasurer, Tim Atkinson, on the amount of funding from the previous year's fundraising initiative at the Huntsville 2011 meeting; and arranging for the ASB Biology Teacher Award sponsored by the Enrichment Fund. President Don Roush mentioned how important this had been to the success of ASB.
- H) Archivist (John Herr) – The ASB Archives and all special collections in the Hargrett Library of the University of Georgia were moved to a new building specifically designated for The Special Collections Library. The Archive System has undergone further revision in response to recent changes in governance procedures. The changes provide folders for the Annual Meeting Arrangements Committee, the Program Committee, and the Microbiology Research Award Committee (a belated name change). The Place of Meeting Committee is deleted, and the location of the Enrichment Fund Enhancement Device is recognized.
- I) Journal Editor (Jim Caponetti) – The four issues of Volume 58 of SEB for the year 2011 are the first to be online along with the Volume 57, October, 2010 issue. Placing the issues online has greatly reduced journal production costs. Copies of the issues for 2011 have been printed and bound by Fed Ex/Kinko's for the typeset and for the archives. This year's invited research paper is by Dr. David Etnier, and it appears in the January, 2012 issue. The April 2012 issue is accompanied by a supplement on the history of ASB written by Archivist Dr. John Herr.
- J) Web Editor (Ashley Morris) – Ashley reported that she needed assistance (compensated) for making necessary improvements to the ASB website. She suggested that a paid student position (perhaps \$500) would be ideal for this. Discussion followed. Ashley reiterated that she doesn't want to give up on her position, but she does need help. Additional discussion followed regarding the placement of Society information, such as dues payment on the website.
- K) Book Review Editor (Melissa Pilgrim) – The ASB book review process remained active over the last year. Since my last report, five book reviews have been completed and two books are currently in the review process.

- L) News Editor (Ricky Fiorillo) – No report. Archivist John Herr mentioned that he was told by Ricky that no news items had been received, but that he would solicit future news items from the membership if he could contact them via email. John suggested that Ricky should contact Treasurer Tim Atkinson to get the email addresses for all members.
- M) Membership Officer (Terry Richardson) – Don Roush, Scott Jewell, Tim Atkinson and I have discussed the use of the new registration software for membership surveys. We may try this for registration at the 2013 meeting. We are deeply grateful to the ASB Meeting Coordinator, Scott Jewell, for initiating and leading the development of this new asset.

Since last April, Steve Dial, Hal De Selm, Jim Fralish, Joe Ann Lever, and Don Windler have passed. Obituaries have been published for all except Don. Journal Editor Jim Caponetti stated that Don's obituary will appear in the July issue of SEB.

Terry mentioned that he had received five requests for emeritus status: David Ault, Katherine Gregg, Ken Marion, Rebecca Sharitz, and Joe Winstead.

Motion 2. Terry made a motion to put these individuals forward for emeritus status. The motion was seconded by Roland Roberts. There was no discussion. The motion carried. These individuals will be voted on at the Friday business meeting.

Terry also mentioned that our number of patron members jumped from three to five this year. Our total number of student and regular members has increased by approximately 80, from 857 to 936.

- N) Meetings Coordinator (Scott Jewell) – Scott stated that the cost of everything is rising. However, an increase in fees was necessary so that we wouldn't lose money on the Thursday evening social. Scott mentioned that things look good for this year's meeting, and it appears that we will have between 700-800 members in attendance. Discussion followed regarding abstract submission dates, participation of Tri-Beta, etc. Scott stated that we will have a nice 75th Anniversary cake at the Friday Awards dinner. Discussion ensued regarding the size of future meetings. Vice President Zack Murrell asked if there is a maximum size for our meetings. Treasurer Tim Atkinson said that there is no maximum size per se, but that it is possible to be limited by the size of the host city. Membership Officer Terry Richardson mentioned that we usually bring in around 60-70% of our membership, so in order to increase attendance we will need to increase membership. Past President Patricia Cox pointed out that we also need to concentrate on increasing the number of affiliates. Tim mentioned that in order to increase membership, we need to increase the number of potential members on our database, and the potential for new members is real. Tim and Scott mentioned that we have software that will allow us to do this. President Don Roush recognized Scott as a new patron member. He also thanked AST Environmental (Terry Richardson and Jeff Selby) for becoming a patron member.

III. Committee Reports

- A) Annual Meeting Arrangement Committee (Scott Jewell) – no report
- B) Nominating Committee (Patricia Cox) – The nominating committee was composed of Patricia Cox (chair), Patricia Parr and W. Michael Dennis. Information on each candidate was gathered and submitted to SEB for publication. The nominees are as follow:

President-Elect

Zack Murrell - Appalachian State University

David Whetstone - Jacksonville State University (retired)

Vice President

Rebecca Cook - University of Memphis at Jackson

Joey Shaw - University of Tennessee at Chattanooga

Members-at-Large

Judy Awong-Taylor - Georgia Gwinnett College

Anisha Campbell - Bowe State University

William (Bill) Ensign - Kennesaw State University

Danny J. Gustafson - The Citadel

Patricia pointed out that next year, we will be electing a Vice President, Secretary, and two Members-at-Large to Council.

- C) Resolutions Committee (Patricia Cox) – Patricia distributed, and read to the members of the EC the resolution regarding this year's meeting at Athens, GA.

Motion 3. Motion by Committee to accept the resolution, no second needed. This will be voted on by membership at the Friday Business meeting.

- D) Program Committee (Nicole Welch/Howie Neufeld) – The Program Committee expanded from two to four members this year. The Chair (Nicole Turrill Welch) worked closely with Brian Toone, Samford University, who programs the abstract submission site, and organized the paper and poster sessions. The second member, Patricia Cox, coordinated communication with Scott Jewell, Meeting Coordinator. The third and fourth members, Howie Neufeld and Zack Murrell, produced the printed program. Clear, agreed-upon lists of duties must be drafted for the Meeting Coordinator and the Program Committee. Abstract submission deadlines must never be changed without the approval of the Program Committee Chair. Lastly, the Association must consider either (1) increasing Brian Toone's pay, or (2) using an abstract/meeting management company for future meeting programs.

Nicole emphasized the need for meeting deadlines. Discussion followed. President Don Roush complimented the committee and the quality of this year's printed program.

- E) Publications Committee (Joey Shaw) – Joey reminded the EC that a vote needs to be made on an official name for our new publication. Further, Joey stated that the Publications Committee recommends *Eastern Biologist*. Discussion followed. President Don Roush inquired how persons will know, by the title, that molecular papers will be emphasized. Ashley Morris mentioned that if molecular was in the title, some might feel the journal isn't suited to their field of study. In other words, *Eastern Biologist* is much more general, and might elicit more submissions. More discussion followed. Don emphasized that regardless of the specific title, we will need to broadly advertize the actual scope of the journal. Joerg-Henner Lotze mentioned that the title seemed acceptable. Christi Magrath reiterated that we must advertize the journal appropriately. Discussion followed regarding publishing in *Northeastern Naturalist*.

Motion 4. There was a motion from Committee that the second official journal of ASB be titled *Eastern Biologist*. Being a motion from the committee, no second was necessary. The motion carried.

Discussion followed regarding how to get persons involved in serving on the editorial board for the new journal. Joey initiated a further discussion on the scope of the journal. It was suggested that we attempt to have the first issue by the April 2013 annual meeting.

- F) Microbiology Research Awards Committee (Don Roush) - The Program Committee contacted the chair of the Microbiology Research Awards Committee (MRAC) in preparation for sending abstracts. The appointed chair informed the Program Committee that he had resigned as chair of MRAC. The next person on the committee also refused to serve. The Program Committee chair contacted President Don Roush, who agreed to serve as chair due to the short time until the meeting. The Program Committee chair sent abstracts for students who indicated that they wanted to be considered for this award.
- G) Graduate Student Support Committee (Richard Carter) – The announcement of the availability of funds was published in the October 2011 issue of SEB. Eight applications requesting funding were received by the chair. A total of \$2,270.78 was requested, and the average amount requested was \$283.85. After reviewing the applications, the committee recommended funding all of the applicants. It was confirmed through the ASB Treasurer that all applicants were members of ASB and that sufficient funds were available. A total of \$2,285 was funded, with the average amount being \$285.63. Treasurer Tim Atkinson and committee members Michael Gangloff and Lisa Kelly are commended for their excellent assistance.
- H) Finance Committee (Tim Atkinson) – No report. President Don Roush mentioned that the committee had not been active during the past year.
- I) Database Management – No report. President Don Roush stated that this committee will become more active.

- J) Committee on Human Diversity (Heather Griscom) – No report. President Don Roush stated that there would be a luncheon at this year's meeting hosted by those members of this committee in attendance.
- K) Education Committee (Zach Felix) – This year was a year for regrouping for the Education Committee. Luckily, Nicole Welch planned the “A New Vision for Undergraduate Biology Education” symposium and so there will be plenty of opportunities to discuss and learn about education at the 2012 meeting. On Friday, April 6th during lunchtime, our committee will host a discussion entitled “ASB Education Committee: What Can We Do For You?” During this discussion we hope to establish what the current needs are within our community and use these to provide future chairs with more direction for the Committee. As Chair, I am working on establishing a portfolio with the Committee members' names and contacts, and the outcomes of the luncheon discussion. I feel this will be helpful for strengthening continuity for the committee.
- L) Meritorious Teaching Award Committee (Mike Baranski) – The Committee considered several nominations submitted for this award. Only one new nomination was received in 2012. The others were submitted in previous years, but were examined because of the committee guideline that nominations are kept active for at least two years following the year of original submission. A winner was selected to receive the 2012 award and will be announced at the ASB banquet on April 8, 2012.
- M) Conservation Committee (Pete VanZandt) – No report.
- N) Poster Awards Committee (John Delfino) – No report.
- O) Senior Research Award Committee (Gavin Lawson) – Two papers meeting the criteria for submission were reviewed by the committee, “Severe Mammal Declines Coincide with Proliferation of Invasive Burmese Pythons in Everglades National Park” by Michael Dorcas (Davidson College) and “Kral's Beardtongue, a narrowly-endemic new species of *Penstemon* (Plantaginaceae) from the Cumberland Plateau of Alabama and Tennessee” by Dwayne Estes (Austin Peay State University). All three committee members agreed that both papers were excellent. However, upon deliberation the paper by Michael Dorcas received two first place nominations and was chosen the winner for this year's award.
- P) Student Research Awards Committee (Andy Methven) – No report. President Don Roush and Program Committee Chair Nicole Welch stated that awards will be presented.
- Q) Membership Benefits Committee (Terry Richardson) – The chair of the committee submitted to President Don Roush, as a motion, a proposal to set up SENA as the official ASB journal and to start a second journal to

address issues not covered by SENA. The motion passed. Members can now subscribe to SENA at a significantly reduced cost. Don is putting together an editorial board for the new journal.

- R) Bioinformatics Committee (Zack Murrell) - The Committee chair has been working to organize herbaria and museums in the Southeast to database collections. Under the auspices of SERNEC we submitted a new proposal in October 2011 to NSF to seek funding from the ADBC Program and are waiting to hear the results. Also under the auspices of SERNEC, we organized a georeferencing workshop in January 2012. The Chair needs to work to utilize the expertise and energy of the committee members to move the Committee's efforts forward. We also need to include the bioinformatics molecular realm in our efforts at outreach and education.

IV. Affiliate Society Reports

- A) AAAS (Tim Atkinson) – No report.
- B) AIBS (Stephanie Songer) – I spoke with the Business and Programs Development Manager for AIBS, and learned that AIBS has become a more active organization since December 2011. However, ASB's organization membership with AIBS has expired. The membership fee is \$350 per year. My recommendation is for ASB to rejoin AIBS.
- C) NSCA (Alexander Krings) – Activities continue to benefit biological research collections and systematists associated with ASB in many ways, but particularly through the emphasis on advocacy and legislation to increase visibility and funding for systematics research. This past year, NSF proposed to change the *Collections in Support of Biological Research* program (CSBR; formerly BRC) from an annual to a biennial competition. NSCA and collaborating societies advocated on behalf of collections. The EC may be interested to consider this matter as well to determine whether ASB should also become involved on behalf of the collections that support the research of many of its members.
- D) BBB SE District 1 (Steve Coggin) – In the Tri-Beta Southeast District I (the Atlantic coastal states from Virginia to Florida), I visited and evaluated three institutions (Gordon College - Barnesville, GA, USC Aiken – Aiken, SC and Florida Gulf Coast University – Ft. Myers, FL) for receiving new BBB chapters. The Tri-Beta executive committee approved chapters for all three of these institutions and I will be installing the chapters and inducting the founding members at each of these schools in March and April 2012. Chapters throughout the southeast are preparing for the 55th annual meeting that will be held jointly with ASB in Athens, GA on April 4-7.
- E) BBB SE District 2 (Christi Magrath) - At our 55th Annual Meeting, Tri-Beta has over fifty student presentations. District I has over 20 posters and 12 paper presentations; District II has 10 posters and 8 papers. Southeast

District II is the host district and Mu Epsilon/Troy University is the host institute. Dr. Christi Magrath is the hosting Director; Dr. Steve Coggin represents District I. Our Thursday field trip visits the Georgia Botanical Gardens (special conservation and exotic species presentation). Tri-Beta is proud to be an affiliate organization of ASB, and we appreciate the support offered to students, faculty advisors, and other members.

- F) SABS (Lytton Musselman) – No report.
- G) BSA-SE (Lytton Musselman) – No report.
- H) ESA-SE (David vanderMast) – No report.
- I) SWS (Dianna Hogan) – No report.
- J) SHC (Michael Vincent) – No report.
- K) SFC (Carol Johnson) – No report.

V. Old Business

- A) Program Committee (Nicole Welsh) – No report.
- B) Publications Committee (Joey Shaw) – No report.
- C) Ad Hoc Committee Herr Award – No report. This will be discussed on Saturday.

VI. New Business

- A) AMAC and Finance Committee Articulation – President Don Roush discussed this issue with members of the EC.
- B) Articulation of Program Committee and Meeting Coordinator – President Don Roush discussed this issue with members of the EC.

VII. Announcements - The Saturday morning EC breakfast will be in the Oak Room. The EC meeting will be in the same room as the Wednesday meeting.

VIII. Adjourn - Secretary Conley McMullen made a motion to adjourn at 6:05 P.M. The motion was seconded and passed.

Respectfully submitted,

Conley K. McMullen, Secretary
25 April 2012

**ASSOCIATION OF SOUTHEASTERN BIOLOGISTS
EXECUTIVE COMMITTEE MEETING
SATURDAY, 7 APRIL 2012
ATHENS, GEORGIA**

ATTENDANCE: 13 individuals attended the meeting

NAME	CAPACITY
Don Roush	President
Patricia Cox	Past President
Zack Murrell	President-Elect
Conley McMullen	Secretary
Tim Atkinson	Treasurer
John Herr	Archivist
Terry Richardson	Membership Officer
Roland Roberts	EC Member-at-Large
Ashley Morris	EC Member-at-Large
Bill Ensign	EC Member-at-Large
Irene Kokkala	EC Member-at-Large
Christi Magrath	Tri-Beta Division II
James Caponetti	Journal Editor

I. Call to Order and Welcome New Executive Committee (EC) Members –

President Don Roush called the meeting to order at 8:25 A.M., and welcomed the new EC members in attendance. Newly elected members include Zack Murrell (President-Elect), Rebecca Cook (Vice President), Bill Ensign (Member at Large), and Judy Awong-Taylor (Member at Large).

II. Report on Athens 2012 – President Don Roush recognized the outstanding efforts of Meeting Coordinator Scott Jewell with respect to this year's meeting. Don reported that there were 813 members in attendance at this year's meeting. Treasurer Tim Atkinson mentioned that our total intake from the meeting was \$165,214. The vast majority came from online registrations. Discussion followed regarding the use of credit cards for registration. President Elect Zack Murrell mentioned the need to address some members' concerns regarding the cost of the meetings. Tim stated that Spartanburg 2014 will be the first meeting site that will be selected entirely by the Meeting Coordinator.

III. Report on Charleston 2013 – Tom Pauley (Marshall University) briefly commented on the upcoming meeting scheduled for April 2013. Tom mentioned that he and his colleagues are looking forward to the meeting and are willing to respond to any requests from the Meeting Coordinator for assistance.

IV. Report from the Past President – Patricia Cox mentioned that Mike Dennis suggested making a contingency plan regarding the Enrichment Fund in case we come upon hard times again.

V. Old Business

- A. Program Committee – Nicole Welch was not in attendance, as she had to leave early. Treasurer Tim Atkinson reported that Nicole wanted to express that Meeting Coordinator Scott Jewell did a wonderful job, and that she now has a better understanding of what's involved in preparing the program. Although she will not be Chair of the committee next year, she stated that she will prepare a digital file to help the new committee members, and she will assist in any other way possible. She will prepare a list of suggestions, deadlines, etc. and share the information with Scott for feedback. Nicole recommended that the Program Committee remain *ad hoc*. President Don Roush shared with the EC other suggestions from Nicole. Discussion followed on a variety of topics including submission of incorrectly formatted abstracts. Howie Neufeld will be working with the Instructional Technology Department at Appalachian State University on some of the issues regarding abstract submissions.
- B. Web Editor – Ashley Morris mentioned that she needed assistance with maintenance of the ASB website. Ashley requested \$500 to fund the hiring of an assistant at her university. It was agreed that hiring an assistant on an hourly basis would be acceptable.

Motion 1. Treasurer Tim Atkinson made a motion that the EC provide \$500 to fund an assistant for Ashley to update the ASB website. Past President Patricia Cox seconded the motion. The motion carried.

President-Elect Zack Murrell suggested that we explore web use sharing among ASB and its affiliates. Zack stated that he will contact affiliate societies to discuss working together on websites for our societies.

- C. AIBS Renewal from the Chair of the Committee – Stephanie Songer suggested to President Don Roush that we renew our membership in AIBS.

Motion 2. Roland Roberts made a motion to renew our membership with AIBS. Irene Kokkala seconded the motion. Discussion followed. The motion carried.

- D. Publications Committee – President Don Roush mentioned that progress has been made on contacting potential subject editors for our new journal, *Eastern Biologist*. Ashley Morris stated that she has a list of six individuals who are willing to assist with this. Joey Shaw has also been involved in suggesting potential subject editors. These individuals are: Judy Awong Taylor (Georgia Gwinett College), Chris Gissendanner (Louisiana State University at Monroe), Christi Magrath (Troy University), Ashley Morris (Middle Tennessee State University), Stephanie Songer (North Georgia College and State University), and Dwayne Wise (Mississippi State).

Motion 3. Journal Editor Jim Caponetti made a motion to submit the names of six individuals as the initial editorial board for the new journal. Irene Kokkala seconded the motion. The motion passed.

Roland Roberts and Ashley Morris initiated a discussion on the scope of the new journal. Christi Magrath suggested additional disciplines that might be included.

Motion 4. Journal Editor Jim Caponetti made a motion to accept the list of subject editors read by Ashley Morris. Past President Patricia Cox seconded the motion. Discussion followed. Membership Secretary Terry Richardson questioned whether the EC or the Publications Committee should create such a list. Discussion followed. The motion carried.

- E. *Ad Hoc* Committee Report on the John Herr Award – Past President Patricia Cox, reporting for Tom Wentworth, stated that the Committee requests changing the date of submission of the Herr Award nomination to no later than June 15th. A second change is to require that a recipient has served as an elected or appointed officer of ASB. Discussion followed. Treasurer Tim Atkinson clarified that a recipient should meet all criteria as listed in the description of the award.

Motion 5. The Committee made a motion to adopt the report. The motion carried.

- F. AMAC, Finance Committee, Program Committee and Meetings Coordinator – President Don Roush stated that he would like to get more involvement from the membership of the various committees, thus helping them all work together in a coordinated fashion. Don will discuss this with the appropriate committee members.

VI. New Business

- A. Sales Tax Exemption – Archivist John Herr stated that, according to the North Carolina Department of Revenue, ASB can apply for sales tax exemption by having its corporate agent, Mike Baranski submit the application (Form E585) to the North Carolina Department of Revenue. We do not yet know if a similar situation applies in other states.
- B. AAAS Representative – President Don Roush mentioned that AAAS has contacted ASB requesting a new representative. Don asked Treasurer Tim Atkinson, as a member of AAAS, if he would be our representative. Tim mentioned that his company, Carolina Biological Supply would support his membership in AAAS, and that he would be willing to comply with the will of the EC. Tim is already our representative, so the EC will inform AAAS of this.
- C. EC Setting the Standard for Fees for Registration – Archivist John Herr broached the topic of waiving registration fees for emeritus members, and possible abuses of this privilege. Discussion followed.

Motion 6. John Herr made a motion that EC abolish the waiver of registration fees for emeritus members. Past President Patricia Cox seconded the motion. Discussion followed. The motion carried.

- D. Symposia for WV – President Don Roush requested that we encourage our colleagues to submit symposia ideas for the April 2013 meeting. Roland Roberts inquired among fellow EC members whether they had ideas for symposia. Discussion followed.
- E. Article II, Section 3 – Membership Officer Terry Richardson mentioned that we need to correct the statement in Article II, Section 3 of the Constitution so that only the journal SEB comes with the base dues for the Society. Don suggested that Archivist John Herr create a replacement for the current statement. Discussion followed.
- F. Elections – Membership Officer Terry Richardson suggested that it is time that we go to an electronic vote for elections. Discussion followed. This would require a bylaws change, which John Herr mentioned would be easy to accomplish. President Don Roush created an *ad hoc* committee to investigate this topic. Treasurer Tim Atkinson volunteered to chair the committee. Other committee members will include Roland Roberts and Irene Kokkala.
- G. EC Google Groups – President-Elect Zack Murrell raised the possibility of creating Google Groups to enhance communication. Discussion followed.
- H. Plenary Speakers – President-Elect Zack Murrell stated that it would be a good idea to plan earlier for upcoming plenary speakers. Discussion followed.
- I. Tri-Beta – Christi Magrath stated that at this year's meeting there were just over 40 papers, and almost 20 posters. Overall, it was a very successful meeting.

VII. Announcements – President Don Roush announced that the Interim EC Meeting will be held on either September 1 or September 22, 2012.

Membership Officer Terry Richardson announced that, after many years, he will be stepping down from this position.

Bill Ensign inquired as to whether it would be worth having a strategic planning session. Discussion followed.

VIII. Adjourn – Having no other business items, President Don Roush thanked everyone for attending.

Motion 7. Ashley Morris made a motion to adjourn at 11:55 A.M. The motion was seconded and passed.

Respectfully submitted,

Conley K. McMullen, Secretary
26 April 2012

INVITED RESEARCH PAPER

Differential Mate Choice in Mutant Stocks of *Drosophila melanogaster***J. Kenneth Shull, Jr.**Department of Biology
Appalachian State University
Boone, North Carolina**Introduction**

The courtship of male *Drosophila melanogaster* has been well understood for many years and consists of a complex “dance” as well as wing vibrations that induce the female to be receptive (Bastock and Manning, 1955; Ritchie and Kyriacou, 1996; Cobb and Ferveur, 1996). The wing vibrations have been termed the “song” and consists of two parts, the “sine” song which serves to arouse the female and the “pulse song” which identifies the male as the appropriate species of *Drosophila* (Ewing and Miyan, 1986; Ritchie and Kyriacou, 1996).

Since the courtship song seems to be so important in mating success it would seem likely that the males with wing shape mutations would be at a disadvantage in mating since they should not be able to produce a normal song. This idea was supported by McRobert, Schnee and Tompkins (1995) who showed that males with the raised wing phenotype (determined by the mutation *rw*) could not produce the appropriate courtship song and were less successful than wild-type males when courting wild-type females.

Among the wing-shape mutations in *D. melanogaster* that are known are vestigial (*vg*), curved ©, dumpy (*dp*), cut (*ct*), miniature (*m*), scalloped (*sd*), apterous (*ap*) and many others. The phenotypic expression of these vary from apterous with no wings to scalloped with only the inner margin of the wing affected. The males of each of these should be at a disadvantage in mating competition, especially in competition with wild-type males.

Aldridge (2005) showed that this was not the case with vestigial-winged flies. She found no difference in *D. melanogaster* female mate preference between vestigial-winged males and Or-R wild-type males. Her work indicated that two or more autosomal genes were involved in mate preference and that the original stock was heterogeneous for females that always chose vestigial-winged males, females that always chose wild type males, and females that seemed to have no preference. The presence or absence of wings on the males in the *vestigial* stock or the wild-type stock seemed to have no bearing on the mating preference of the females. Aldridge also showed that Or-R wild type males apparently have normal courtship behavior, because they were preferred by *sepia* females over *sepia* males. Stockdale (2004) showed the courtship behavior of vestigial-winged males differed from that of wild-type males.

At least two possibilities may explain the mate choice of vestigial-winged females. The females could respond better to the unusual courtship behavior of the *vestigial* males. It is possible that, since all the mutant stocks have been isolated for many, many generations that the females of the mutant stocks preferred males similar to themselves, based on an unknown mechanism. To investigate these possibilities a series of mate choice experiments were conducted using a variety of wing mutants. In addition, to determine if the mate preference seen by Aldridge was unique to wing mutations, crosses were performed involving autosomal mutations that involved eye color, but not wing shape. Finally, since *apterous* males have been shown to be at a disadvantage in mating (Ringo, Werczberger and Segal, 1992), a series of mate choice experiments using *apterous* males and females were conducted.

Materials and Methods

Drosophila stocks, vials, closures and FlyNap[®] were obtained from Carolina Biological Supply Co. All flies were raised using instant *Drosophila* medium obtained from Carolina Biological Supply Co. or Ward Scientific Co. Flies were anesthetized using either FlyNap[®] or carbon dioxide. Wild type flies were from Or-R stocks. The cultures were maintained at room temperature and all mate choice experiments were conducted in the light.

Newly emerged males and virgin females were selected from 24 to 72 hours before any crosses were made. For each cross up to ten females were placed in a food vial with males from two different stocks. Fifty percent more males than females of each stock to be tested were introduced. The males and females were left in the crossing vials for six hours, after which the males were discarded and the females were placed in individual vials and allowed to lay eggs for one week. At the end of the week the females were removed and the offspring were inspected to determine with which male the female had mated.

There were four different types of crosses based on the type of males that were tested:

1. Males from the same stock as the females and wild-type males.
2. Males from the same stock as the females and males from a different mutant stock.
3. Males from two different stocks, but not from the same stock as the females.
4. In addition, one type of cross was done with wild-type females and various males.

Since most crosses involved mutant females paired with males of the same stock and another type of male, the male involved in the mating could be determined at the F_1 . If the female mated with a male from her own stock, the F_1 flies would show that mutation. Any other mating would produce phenotypically wild-type offspring. In crosses where wild-type females were used all of the F_1 progeny were wild-type, so the resulting F_2 offspring had to be examined to determine which type of male was involved in the mating.

Results

Twenty different combinations of mate choice experiments were conducted yielding 378 progeny. They are presented in three tables, depending on which females were used.

Table 1 A Summary of the Results of Crosses Involving Wing Mutations and Or-R Wild-type

♂ ♀	<i>c</i>	<i>dp</i>	<i>vg</i>	wild-type	Total
<i>C</i>		<i>c</i> 7 <i>dp</i> 3	<i>c</i> 5 <i>vg</i> 1	<i>c</i> 12 wild-type 14	24 18
<i>Dp</i>	<i>dp</i> 8 <i>c</i> 1		<i>dp</i> 12 <i>vg</i> 1	<i>dp</i> 8 wild-type 14	28 16
<i>M</i>				<i>m</i> 0 wild-type 4	0 4
<i>Sd</i>				<i>sd</i> 3 wild-type 1	3 1
<i>Vg</i>	<i>vg</i> 7 <i>c</i> 3	<i>vg</i> 5 <i>dp</i> 6		<i>vg</i> 50 wild-type 36	62 45
Or-R		Or-R 10 <i>dp</i> 5	Or-R 25 <i>vg</i> 29		35 34
Totals	19	36	73	142	270

In all cases half the males in the experiment were of the same stock as the females. For instance, in the cross indicated for *c* females and *dp* males, half of the males were *dp* and the other half were *c*.

Since Aldridge (2005) showed that, in an unselected stock, female *vg* seemed to have no preference for *vg* males or Or-R males, we wanted to determine if this was a general rule for mutant stocks. Of the 201 crosses that were conducted using a mutant female, in 117 cases the mutant chose males of their own stock, while 84 chose males of a different stock. A chi-squared test for random mating indicated that the mutant females were choosing males from their own stock at a significant rate ($p < 0.05$).

In the 59 crosses involving wing mutants, but not involving wild-type, 44 females chose males from their own stock, but only 15 chose males from a different stock. Again, a chi-squared test indicated that the females were choosing males from their own stock at a significant rate ($p < 0.05$).

When given a choice between a male from their own stock or an Or-R wild type male, mutant females chose males from their own stock in 73 and chose Or-R males in 69 cases. Or-R females chose Or-R males in 35 trials and chose mutant males in 34 trials. A chi-squared test indicated that the Or-R females showed no preference for Or-R males or males of their own phenotype ($p>0.9$).

Table 2. The Result of Crosses Involving *apterous* Males and Females

♂ ♀	<i>ap</i>	<i>c</i>	<i>vg</i>	Or-R	Total
<i>Ap</i>		<i>ap</i> 2 <i>c</i> 6	<i>ap</i> 11 <i>vg</i> 1	<i>ap</i> 0 Or-R 18	13 25
<i>vg</i>	<i>vg</i> 8 <i>ap</i> 0				8 0
Or-R	Or-R 13 <i>ap</i> 1				13 1
Totals	22	8	12	18	60

Except for *vg*, *ap* females seemed to select males that were not *ap*. They selected *ap* males over *vg* males in eleven of twelve cases. When *ap* was used as one of the males in the cross, the females chose males from the other stock in 21 of 22 trials.

When *cut*, *dumpy*, and *apterous* females were offered males from their own stock and *vestigial* males, these mutant females chose males from their own stock 28 times and *vestigial* males only three times.

Table 3 Crosses Involving Eye Color Mutants

♂ ♀	<i>bw;st</i>	<i>vg</i>	Total
<i>bw;st</i>		<i>bw;st</i> 8 <i>vg</i> 18	8 18
<i>vg</i>	<i>vg</i> 19 <i>bw;st</i> 3		19 3
Totals	22	26	48

Although the sample size is too small for accurate chi-squared analysis, it seems that both *bw;st* females and *vg* females chose *vg* males over *bw;st* males.

Discussion

The wing song of *Drosophila* is clearly important for females to identify males of their own species and is likely one of the factors that females consider in assessing male fitness (Bastock and Manning, 1955; Cobb and Ferveur, 1996). Given that, it would seem that females of any genetic background should favor wild-type males over any other males, including males from a genetic background similar or identical to that of the females. Aldridge (2005) showed that was not true for the *vestigial* females. Stockdale videotaped the mating behavior of Or-R males and *vestigial* males and found that Or-R males were far more active and vigorous in courtship than were *vestigial* males, yet *vestigial* males were not at a disadvantage in mating.

In this study wing mutations were used that varied from no wings to wings that were nearly normal in appearance. Presumably the smaller and more deformed the wings are less able to produce an accurate wing song. It is very unlikely that *vestigial* males can produce any wing song with their small, shriveled wings. When the data from the female mate preferences in this study are examined and the data pooled, it is clear that, if offered males of their own phenotype and males of any other phenotype, females chose males of their own phenotype over any other type of male. This would indicate that females are assessing some phenotypic characteristic or behavior characteristic of the males that males of from their own stock possess that other males do not possess and this may be unique to each of the stocks examined. The only exceptions to this were Or-R, which might be expected, and *bw;st* females when given the choice of *bw;st* males and *vg* males.

The female choices of the *vestigial* stock may well be associated with the unusual courtship display of the *vestigial* males (Stockdale 2004). When crosses involving *vestigial* males are pooled (not including those with *vestigial* females) it becomes obvious that the *vestigial* males are not favored over males from the females' own stock by *cut*, *dumpy*, or *apterous* females. That would indicate that the courtship display of the *vestigial* males is not favored by other females.

Since it is known that *apterous* males are usually at a disadvantage in courtship and mating (Ringo, J. R. Werczberger, D. Segal, 1992) the results in this study are surprising. *Apterous* females chose *apterous* males 13 out of 20 times when offered either *apterous*, *cut* or *vestigial* males. Again, it seems that even *apterous* females prefer males from their own stock.

The choice of the *brown;scarlet* females appears to be somewhat different to that of all other mutant females studied. Although there are not enough data to be certain, it seems that they may be choosing *vestigial* males over males from their own stock.

All the stocks used in this study were isolated between 1919 and 1929, including Or-R (Lindsley and Grell, 1968). In this time females of each of these stocks have been exposed only to males with the wing mutation characteristic of that stock. If they have been maintained as un-mixed stocks it would mean that each of these stocks have been isolated for over 1,500 generations, in which time the

females would never have been exposed to males with normal wings, and therefore, a normal wing song. It is possible that some or all of the mutant stocks have been crossed to wild-type and re-extracted, but there is no way to know when or if it has ever happened. Nevertheless, the stocks have been isolated for enough generations that the females have evolved to assess male fitness based on something other than the wing song. That would explain the choices found here. The Or-R wild-type has been inbred since at least 1925 (Lindsley and Grell, 1968) so all males should have the same wing song by now. That would mean that the females really have no alternative to the wing song by these males. The wing song may not be as important in this stock as it would be in the wild, so the Or-R females may not respond as strongly as might otherwise be expected. That would explain the data that indicate that the Or-R females show no preference for Or-R males in these experiments.

What else could female choice be based on except wing song? It is known that pheromones play some part in courtship (van den Berg, *et al*, 1984; Cobb, M. and J-F Ferveur 1996; Ferveur, *et al*, 1996) and movement and approach of males are certainly involved (Tompkins, *et al* 1982)

Although there are not enough data to be certain, it seems that *brown;scarlet* females seem to prefer *vestigial* males over *brown;scarlet* males. This is the subject of further investigation.

Physical isolation of populations can be the first step in speciation. This often leads to differences in mating timing or behavior. The various stocks of *D. melanogaster* have been isolated for many generations, and although no divergence of populations into different species has ever been observed, evolving differences in courtship behavior and mate choice might someday lead to reproductive isolation of populations. In any event, differential mate choice in these stocks should be taken into account in experiments involving these organisms.

Acknowledgments: I wish to thank many former students who have had a hand in this and did much to enhance this paper. Notable among them are Ariel Baehr, Brandon Carpenter, Katie Crump, Jessica Curtis, Craig Johnson, Daniel Kahl, , Heather Lindfors, Maria Mayrhofer, Seth Peoples, Anna Phillips. Sean Westmoreland, Ashley Williams

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**BEQUESTS TO THE
ASSOCIATION OF SOUTHEASTERN BIOLOGISTS**

If you would like to help assure ASB's future through a provision in your will, this general form of bequest is suggested:

I give, devise and bequeath to the Association of Southeastern Biologists, business office located in Burlington NC, the sum of \$_____ and/or (specifically described property).

If property, please describe.

Donations to ASB, a not-for-profit corporation exempt under Internal Revenue Code Section 501(c)(3), are tax-deductible. We welcome any inquiries you may have. In cases in which you have specific wishes about the disposition of your bequest, we suggest you discuss such provisions with your attorney.

AWARDS FROM THE AMERICAN SOCIETY OF ICHTHYOLOGISTS AND HERPETOLOGISTS

2012 AWARDEES

Robert H. Gibbs, Jr., Memorial Award

Presented for excellence in systematic ichthyology. In August 2012 at the annual meeting of the ASIH in Vancouver, BC, Canada, the award was presented to **Lance Grande**, Senior Vice President, Head of Collections and Research, Curator of the Department of Geology, and responsible for the four academic departments of Anthropology, Botany, Geology, and Zoology at the Field Museum of Natural History, Chicago, Illinois.

Henry S. Fitch Award

Presented for excellence in herpetology. In August 2012 at the annual meeting of the ASIH in Vancouver, BC, Canada, the award was presented to **Jonathon A. Campbell**, Professor of Biology and Chair, Department of Biology, University of Texas at Arlington.

Robert K. Johnson Award

Presented for excellence in Service. In August 2012 at the annual meeting of the ASIH in Vancouver, BC, Canada, the award was presented to **Brooks M. Burr**, Professor and Director of Undergraduate Studies in Zoology, Department of Zoology, Southern Illinois University, Carbondale, Illinois.

Raney Fund Awards

Awards of \$833.33 were made to each of the following six young ichthyologists in 2012. They are listed by name and institution.

Casey Benkwitt, Oregon State University
Sarah Fitzpatrick, Colorado State University
Debora Goedent, Ohio University
Gretchen Kroh, St. Edward's University
Elizabeth Lee, University of Alabama
Kim Tengardjaja, University of California at Santa Cruz

Gaige Fund Awards

Awards of \$500.00 were made to each of the following 10 young herpetologists in 2012. They are listed by name and institution.

Catherine Dayger, Portland State University
Robert Denton, The Ohio State University
Maggie Hantak, John Carroll University
Kayla Hardwick, University of Idaho

Christina Howard, Portland State University
Justin Lawrence, University of Mississippi
Russell Ligon, Arizona State University
Gail McCormick, Pennsylvania State University
Samantha Rumschlag, Miami University
Jason Warner, California State University at Northridge

Stoye Awards

Awards for best oral presentations were made to each of the following five students in 2012. Each winner received a cash award of \$250.00, a certificate, and all available back issues of *Copeia*. They are listed by name and category.

Caleb McMahan, General Ichthyology
Jared Grummer, General Herpetology
Robert Denton, Genetics, Development and Morphology
Julie Lee-Yaw, Ecology and Ethology
Alexander Wolf, Conservation

Storer Awards

Awards for best poster presentations were made to each of the following two students in 2012. Each winner received a cash award of \$250.00, a certificate, and all available back issues of *Copeia*. They are listed by name and category.

Michelle Tipton, Ichthyology
Chelsea Korfel, Herpetology

Clark Hubbs Travel Awards for 2012

Herpetology

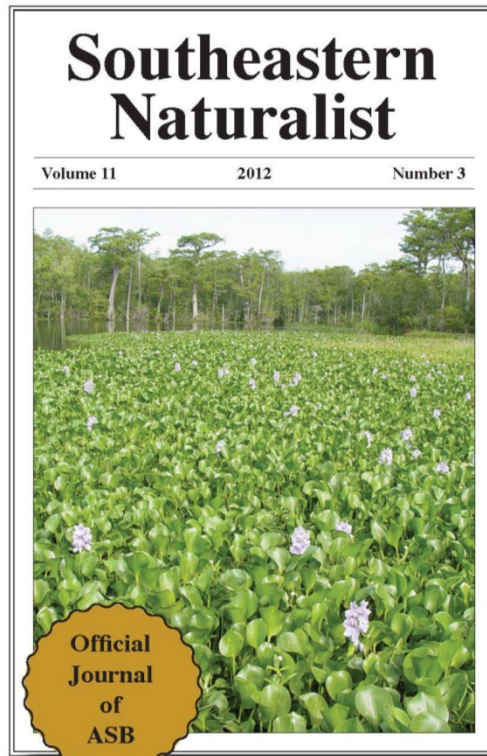
1. **Christopher Anderson**
2. **James Stewart**
3. **Robert Jadin**
4. **Perry Wood**
5. **Sarah Green**
6. **Sean Reilly**
7. **Jeanine Rebsrider**
8. **Heather Mackey**
9. **Kevin Young**

Ichthyology

1. **Alison Deary**
2. **Noelle Bowlin**
3. **Lindsay Harris**
4. **Breton Skies**
5. **Luke Bower**
6. **Max Bangs**
7. **Marisa Stachowski**
8. **Mollie Taylor**
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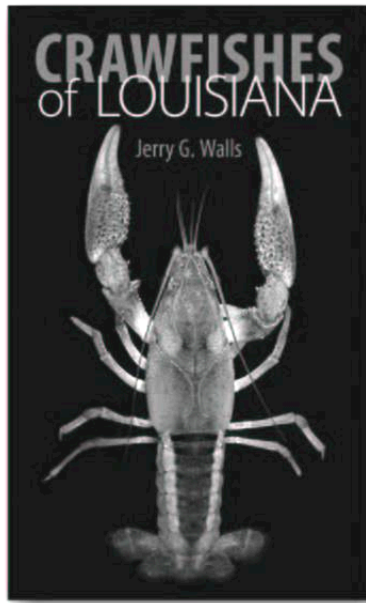
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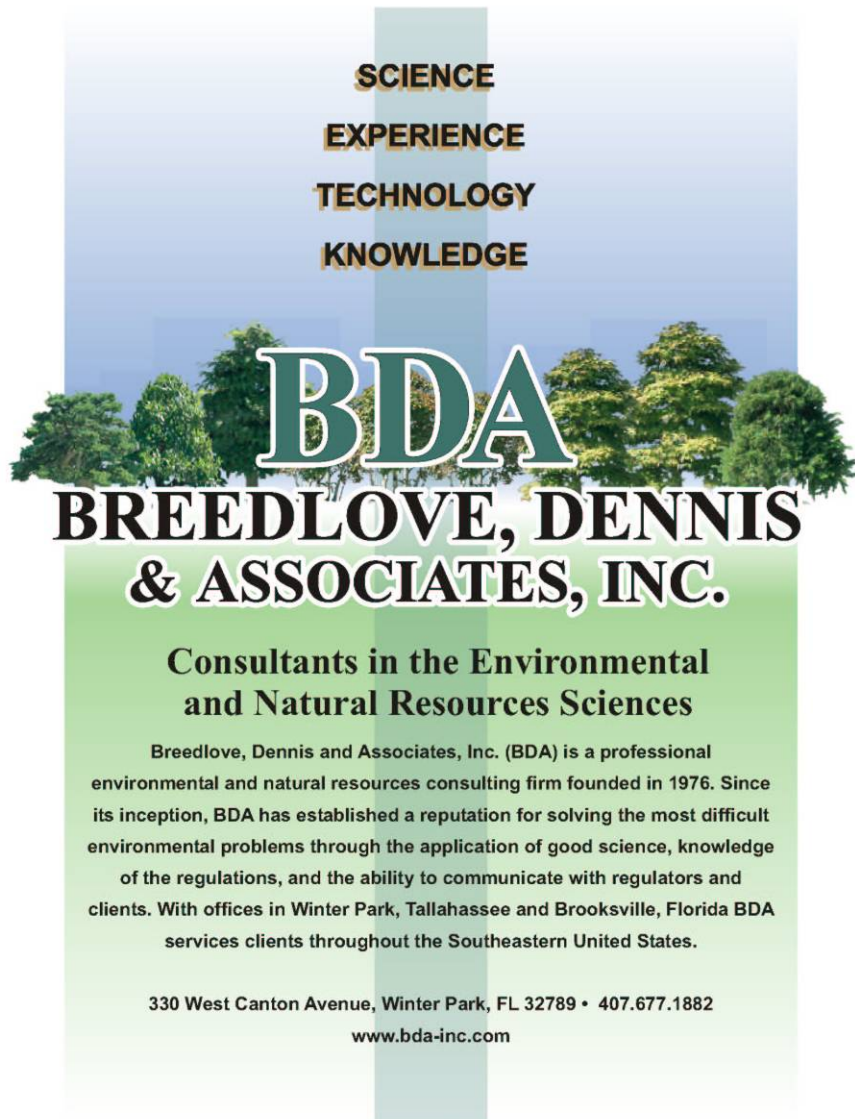


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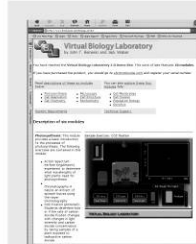


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