

1998

82nd Annual Meeting, 1998. Secretary's Report and Financial Statement

Academy Editors

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JOURNAL ARKANSAS ACADEMY OF SCIENCE

ANNUAL MEETING 3-4 APRIL 1998
UNIVERSITY OF ARKANSAS FOR MEDICAL SCIENCES

James Daly
President

Rose McConnell
President-Elect

John D. Rickett
Secretary

Joyce Hardin
Treasurer

NAAS Delegate

Henry Robison
Historian

Secretary's Report

MINUTES OF THE 82ND MEETING

FIRST BUSINESS MEETING 3 APRIL 1998

Number present: 19

President-Elect Rose McConnell called the meeting to order at 1108 and welcomed all attendees.

McConnell recognized the following individuals/committees for reports

1. Wayne Gray, Local Arrangements Committee:
 - (a) Gray asked if anyone had ridden the shuttle from the Hilton to be sure it was operating (at is);
 - (b) eighty-seven presentations are scheduled in four concurrent session each day;
 - (c) received about 100 pre-registrations;
 - (d) keynote speaker is Dr. Gregory Wilson, Director of NASA Lab in Huntsville, AL. He will speak at 1630 hrs.;
 - (e) evening events will be a reception at the Discovery Museum and meal catered by Corky's at the River Market with musical entertainment by Lark of the Morning.

2. John Rickett, Secretary:
 - (a) asked members to read and look for errors in minutes of the 1997 Business Meetings, and motion for approval, pending changes, will be made at the second business meeting;
 - (b) membership report: 186 regulars; 47 lifers; 48 students; 17 sustaining; 1 sponsoring; and 2 sponsoring/conditional life members (total: 301). The recent trend has been downward, and should we be concerned? Submit any ideas for recruitment to J. Daly (when his health improves). Joe Guenter asked if the decline has been caused by lack of interest or forgetfulness. Rickett opined that its probably mostly lack of interest and mentioned specifically young faculty in the state who aren't getting involved.

3. Joyce Hardin, Treasurer: reviewed the financial statement briefly, emphasizing major sources of income, investments and expenses, and asked for questions—none came.

FUNDS

Beginning Balance - 1 January 1997	\$20,512.95
Net Gain 1997	2,227.96
CLOSING BALANCE - 31 DECEMBER 1997	\$22,740.91

DISTRIBUTION OF ACCOUNTS

Interest Bearing Checking Account (Mercantile Bank, Conway, AR)	2,949.86
Certificates of Deposit	
Dwight Moore Endowment (Mercantile Bank, Conway, AR - No. 175192 - 5.2% Int.)	3,646.15
Life Membership Endowment (Mercantile Bank, Conway, AR - No. 175193 - 5.2% Int.)	12,144.90
CD Unrestricted (Mercantile Bank, Conway, AR - No. 175443 - 5.2% Int.)	4,000.00
TOTAL	\$22,740.91

Respectfully Submitted,

Dr. Joyce M. Hardin, AAS Treasurer

Financial Statement, Arkansas Academy of Science

INCOME: 1 January 1997 to 31 December 1997

1. INDIVIDUAL MEMBERSHIPS			
a. Regular		2,405.00	
b. Sustaining		175.00	
c. Life		375.00	
d. Associate		360.00	
		3,615.00	3,615.00
2. INSTITUTIONAL MEMBERSHIPS			
			1,500.00

3. PROCEEDINGS, SUBSCRIPTIONS		5,161.30	
4. PROCEEDINGS, MISC. SALES		200.00	
5. PROCEEDINGS, PAGE CHARGES		4,960.00	
6. INTEREST			
a. Interest Bearing Checking Account (1/97 - 7/97)	99.14		99.14
7. ANNUAL MEETING		2,711.15	
8. ENDOWMENT DONATIONS			
a. Dwight Moore Endowment		30.00	
b. AAS Endowment	4,940.29		
c. AAS Graduate Research	125.00		
d. AAS Undergraduate Research	125.00		
e. AAS Publication	25.00		
	5,245.29	5,245.29	
TOTAL INCOME			\$23,491.88

Financial Statement, Arkansas Academy of Science

EXPENSES: 1 January 1997 to 31 December 1997

1. AWARDS			
a. Conway Trophy & Awards, Plaques - Arkansas Science Talent Search (#695, #001)	318.00		
b. Arkansas Science Fair Association (#687)	450.00		
c. Arkansas Junior Academy of Science (#688)	250.00		
	1,018.00	1,018.00	
2. PROCEEDINGS			
a. Stan Trauth -Editorial Consultation and Travel Vol. 50 (#679)	200.00		
b. Creative Multigraphics Vol. 50 (#684)	11,940.75		
c. Joy Trauth -Editorial Consultant Vol. 51 (#673)	500.00		
	12,640.75	12,640.75	
3. OFFICE EXPENSES			
a. Secretaries Office - John Rickett (#693)	520.83		
b. Treasurer's Office - Joyce Hardin (#603)	10.60		
	531.42	531.42	
4. ANNUAL MEETING		1,795.25	
5. NEWSLETTERS			
a. UALR - Postage Fall 1996 Newsletter (#678)	58.69		
b. Kwik Print - Spring 1997 Newsletter (#680)	287.55		
c. UALR - Postage Spring 1997 Newsletter (#681)		57.30	
	403.54	403.54	
6. DUES			
National Association of Academies of Science (#602)		62.50	
7. BANK CHARGES			
Mercantile Bank - New checks and deposit slips		70.65	
8. SERVICE CHARGES			
Union Bank - Monticello		19.90	
9. TRANSFER TO CD (Unrestricted)		4,000.00	
TOTAL EXPENSES			\$20,542.02

4. Stan Trauth, *Journal* Editor: Stan presented a copy of Volume 51; it is larger and less expensive than Volume 50 and explained that he had worked with a different printer. Stan also presented his plan for restructuring the Editor's office; he proposes an Editor-in-Chief, a Managing Editor and a better organized group of Associate Editors; and asked for discussion. No discussion came. Bill Shepherd moved (2nd: Hemmati) the plan be accepted. Daly suggested that Stan move up to Editor-In-Chief and occupy that office for two years during the transition. Bill Shepherd suggested that both Editors should be on same campus for ease of working together. Stan agreed to discuss it.
5. David Saugey, *Newsletter* Editor: Saugey asked for specific news items and for individuals to serve as campus representatives or spokespersons to gather information and send it to him. He also explained that time sequencing in getting meeting information may cause the *Newsletter* to be a little late sometimes—just be patient or call him. Saugey moved (2nd: Hemmati) that the Academy set aside \$500 to support the preparation and mailing of the Newsletter over the coming year.
6. Mike Matthews, Nominations Committee (Mike Rapp and Art Johnson, members): Matthews distributed a list of two nominees, William Willingham (Chemistry, UAPB) and Mark Draganjac (Chemistry, ASU). Daly moved (2nd: Hemmati) to accept the committee's report. McConnell asked for nominations from the floor but none came.
7. Doug James, Biota Committee: James not present; no report.
8. Jim Daly, Development Committee: Daly plans to send out recruitment letters to campus administrators with information regarding the Academy and encourage them to encourage their people to become involved with the Academy. Matthews moved (2nd: Hernmati) to accept Daly's report.
9. Steve Runge, Westinghouse/Arkansas Science Talent Search: Runge not present; no report.
10. Tom Palko, Junior science & Humanities Symposium: Palko not present; McConnell read a report (Appendix A).
11. Bob Skinner, Junior Academy of Science: Skinner not present; McConnell read a report (Appendix C).
12. Mike Rapp, State Science Fair Assn: Rapp not present;

Arkansas Academy of Science

- McConnell read a report in which Rapp requested \$450 and \$250 for the State Science Fair Assn. and Junior Academy of Science, respectively, for the coming year's activities. Hemmati moved (2nd: Joe Guenter) moved to accept the read reports and the funding requests (Appendix B).
13. McConnell appointed Bob Wiley and Dick Kluender as the Auditing Committee.
 14. McConnell appointed Mostafa Hemmati, Chair, Wayne Gray and Rudy Eichenberger as the Resolutions Committee.
 15. McConnell appointed an *ad hoc* Constitution Committee (John Rickett, Chair, and _____) to work on changes pertaining to the journal title and the editorial office.
 16. Henry Robison, Historian: Robison not present; McConnell read a report.
 17. McConnell asked for additional old business; none came.
 18. McConnell asked for new business:

Daly suggested the Academy draft a letter to President Sugg to support the continuance of operation of the University of Arkansas Press. Daly moved (2nd: Hardin).
 19. McConnell made the following announcements:
 - a. There will be no Sigma Xi breakfast;
 - b. Authors planning to publish must turn in manuscripts to section chairs or Stan Trauth;
 - c. Section chairs need to keep their sessions on schedule;
 - d. The Arkansas Avian Viability Assessment Committee will meet tomorrow immediately following the 2nd business meeting.
 20. McConnell adjourned the meeting at 1155.
- SECOND BUSINESS MEETING*
4 APRIL 1998
- Number present: 58
President-Elect Rose McConnell called the meeting to order at 1113 hrs. and recognized the following persons for reports/business items:
1. Secretary: J. Rickett noted that copies of minutes of last year's business meetings were available at the door and reminded attendees of yesterday's presentation of the minutes and moved their approval. No corrections were received and minutes were approved by voice vote.
 2. Nominations Committee: (M. Mathews, M. Rapp and A. Johnson) Mark Draganjac and William Willingham have been nominated for the Vice President's election. McConnell asked for nominations from the floor, none came, and Doug James moved (2nd: Walt Godwin) that nominations ceased. Motion passed, and ballots were distributed.
 3. Treasurer: J. Hardin noted that copies of the financial report were available at the door, then reviewed the Academy's income, investments and expenses. She observed that the pre-payment of page charges has given us more breathing room in that we can now pay for the *Journal* without cashing in CDs. She also pointed out that David Saugey has been instrumental in setting up a way to contribute leftover monies from another meeting to the Academy. McConnell then recognized the Auditing Committee which reported that the books were in order. The Treasurer's financial statement was approved.
 4. Biota Committee: D. James reported that no new lists have been received, so they are beginning the process of reviewing the old lists to update and prepare them for "commercial" publication. Trauth moved (2nd: Mathews) to accept his report. Passed.
 5. Avian Viability Assessment Committee: Tom Foti described the function of the committee as providing the Natural Heritage Commission and Arkansas Game & Fish Commission with information to rank and prioritize management/restoration projects because of limited funds. The thrust will move later to other faunal groups.
 6. Historian: H. Robison reported this is the eighth time for the Academy to meet on the UAMS campus. Other years were 1943, 1944, 1945, 1947, 1949, 1958 and 1989.
 7. *Journal* Editor: Stan Trauth described his proposed reorganization of the journal preparation process. He proposed that a new position, Editor-in-Chief, be erected, that the current Editor's position be renamed "Managing Editor" and be elected. After serving as Managing Editor, the individual would move up to Editor-in-Chief. Considerable discussion followed regarding status in the Executive Committee, justification, length of terms, and other details. Trauth moved (2nd: Daly) for adoption and motion passed by voice

- vote. McConnell charged the *ad hoc* Constitution Committee to affect the proper alterations then appointed another *ad hoc* committee (Stan T. D. Kluender and _____) to find a new editor. (Secretary's Note: normally the details of such a change in officer structure are hammered out by an *ad hoc* committee first [not by a constitution revision committee], then brought to the membership for final discussion and approval (or denial). I think our Constitution would still adjure us to follow this more prudent procedure; if not, the membership may rescind this vote at next year's meeting.
8. McConnell called for volunteers to assist Rickett on the *ad hoc* Constitution Committee; no volunteers appeared.
 9. *Newsletter* Editor: Saugey said he will be contacting institutions and individuals for information for the *Newsletter*. He also reminded Academy members to understand that he must receive information regarding the next meeting before he can prepare the *Newsletter*, consequently it may be a little later than first anticipated.
 10. Ancillary organizations:
 - a. Westinghouse/Arkansas Science Talent Search: no representative was present to report; we assumed they need \$200 of continued funding for the coming year.
 - b. Junior Science & Humanities Symposium: (see Appendix A for report)
 - c. State Science Fair Association: (see Appendix B for report); continued funding request of \$450.
 - d. Junior Academy of Science: (see Appendix C for report); continued funding request of \$250.
 - e. Robison moved (2nd: W. Godwin) that we continue these levels of support. Motion passed.
 11. McConnell recognized Jim Daly to restate his motion that the Academy to draft a letter of support for the continuance of operation of the University of Arkansas Press. Passed.
 12. Resolutions Committee (Mostafa Hemmati, Wayne Gray and Rudy Eichengerger): (see Appendix D for resolutions). Kluender moved (2nd: Godwin) that the resolutions be accepted. Passed.
 13. Awards Committee: W. Gray (for Mike Soulsby) and Amy Wilson, representing the Arkansas Environmental Federation: (see Appendix E for list of awardees).
 14. Meeting results and data (W. Gray): 230 registrations (about 100 pre-registered); 125 attended the banquet; 87 presentations, 45 of which were student papers.
 15. McConnell called for any other old business; none came.
 16. McConnell then announced the new Vice-President is Mark Draganjac.
 17. McConnell asked for new business:
 - a. Calvin Cotton suggested we need a permanent website. McConnell asked for a motion to set up a committee. Cindy Kane so moved (2nd: Matthews); approved, and McConnell named Mark Draganjac, Calvin Cotton and Walt Godwin to an *ad hoc* committee. Cotton also volunteered to work on a new logo for the Academy and moved (2nd: Robison) that we commission him to do so. Motion passed. Cotton would welcome input.
 - b. No other new business came forth.
 18. McConnell made the following announcements:
 - a. Pick up and deliver unclaimed journals back to your respective campuses;
 - b. Give manuscripts to Stan Trauth;
 - c. The Avian Viability Committee will meet immediately following this one;
 - d. Thanks to Wayne Gray for chairing the Local Arrangements Committee.
 19. McConnell recognized Dick Kluender who presented Bob Wiley with a plaque of appreciation for his 10-year (two terms) service as Treasurer.
 20. McConnell then recognized out-going President Jim Daly with a plaque of appreciation. Daly then officially recognized Rose McConnell as the incoming President and adjourned the meeting at 1337 hrs.

Respectfully submitted,

John Rickett, Secretary
20 April 1998

APPENDIX A

JUNIOR SCIENCE AND HUMANITIES SYMPOSIUM

The 32nd Arkansas JSHS was held on Arkansas Tech University campus March 27–29, 1998. Science students and teacher delegates from across the state attended the program. Featured were the oral presentations of the 16 student finalists in the paper competition, lectures by scientific

researchers, tours of the science and engineering departments at ATU and a poster contest to display individual student research.

Geoffrey Schmidt from Little Rock Central High School was awarded first place in the oral research paper presentation and received a \$4,000 scholarship from the National JSHS. He and five other students were selected to attend the National JSHS in Albuquerque, NM later this month. Geoff will present his paper on computer programming, "Two new tools for visible surface determination", and will compete in the national student research paper competition. Tom Palko, Director, will accompany the students to the national symposium. Four other students received scholarships to Arkansas Tech University. Cash prizes were awarded to the winners in the two divisions of the poster contest, the small schools and the large or magnet schools.

Delegates enjoyed musical productions, which included operetta selections and a program of harpsichord, piano and organ music by faculty and students of ATU. The delegates also participated in social mixers which enabled them to become better acquainted.

The 33rd Arkansas JSHS will be held at Arkansas Tech University on March 26-28, 1999.

Tom Palko, Director
3 April 1998

APPENDIX B

STATE SCIENCE FAIR ASSOCIATION

Thank you for the support the Academy has provided for the past 15 years, both in terms of members of the AAS serving as judges and in terms of financial support. This memo serves as a report of the Science Fairs held in Arkansas during 1998:

Central (held at UAMS, Mar 14): Margie Snider, fair director, and Marian Douglas, Jr. Acad. director. 340 students participated.

Northcentral (Lyon College, Batesville. Mar 13): Beverly Meinzer, fair director, and Kathy Campbell, Jr. Acad. director. 266 students participated.

Northeast (Ark. State Univ., Jonesboro, Feb 27, 28): Larry Mink, fair director, and Ron Johnson, Jr. Acad. director. 136 students participated.

Northwest (Univ. of Ark. at Fayetteville, Mar. 13): Lynne Hehr, fair and Jr. Acad. director. 341 students participated.

Southcentral (Henderson State Univ., Arkadelphia, Mar 6). Joe Bradshaw, fair director, and Lisa Cobb, Jr. Acad. director, 153 students participated.

Southeast (Univ. of Ark. at Monticello, Mar 13): Jim

Leslie, fair director. 235 students participated.

Southwest (Southern Ark. Univ., Magnolia, Mar 13): Daniels, fair director. 213 students participated.

Westcentral (ASMS, Hot Springs, Mar 2-6): Alecia Castleberry, fair director, and Shane Wilbanks, Jr. director. 225 students participated.

Approximately 260 students are expected to register for the state science fair, to be held April 3, 4 at the Univ. of Central Arkansas in Conway.

A request for funding for the Arkansas Science Fair Association follows:

"The Arkansas Science Fair Association requests the Arkansas Academy of Science to continue its support for the past 12 years of \$50 to each of the nine science fairs in Arkansas that will send students and teachers to the International Science and Engineering Fair, to be held in May, 1998 in Fort Worth, Texas. The total contribution being sought is \$450."

Should the membership approve this request, please make the check payable to "Arkansas Science Fair Association" and mail it to Dr. Mike Rapp, Department of Chemistry, Univ. of Central Arkansas; Conway, AR 72035.

Mike Rapp, Director

APPENDIX C

ARKANSAS JUNIOR ACADEMY OF SCIENCE

Seventy-four students from six of the eight regions and representing 12 high schools participated in the AJAS state contest held at the Univ. of Central Arkansas on April 12, 1998 follow:

students: 74 (+9)	entries: 70 (+7)
9th grade: 4 (+3)	
10th grade: 14 (-4)	
11th grade: 32 (+8)	
12th grade: 20 (+2)	
(four did not list grade)	

Nine school had students who won awards:

ASMS: 23 category awards; two overall
Central: 13 category awards; four overall, top student
Mills: five category awards; one overall
Harmony Grove: four category awards

Three students, who won the Junior/Sophomore Division in 1997, and two teacher-sponsors attended the American Junior Academy of Science. The students were

Secretary's Report

Geoffrey Schmidt, Freddy Nguyen and Sapan Shah, and the teachers were Gary Hufford and Gary Earleywine. The Arkansas Junior Academy paid half of the travel and registration fees for one student and one teacher, a total of \$820. This meeting was held in conjunction with the meeting of the American Association for the Advancement of Science.

The Arkansas Junior Academy thanks the Academy of Science for its continued encouragement and monetary support and requests continued support of \$250 for the coming year's activities.

Robert D. Skinner, Director
3 April 1998

(Secretary's Note: an inconsistency between this report and Rapp's report occurs regarding the date of meeting (April 12 vs. April 13). Rapp's report states the two organizations met together.

George Harp

APPENDIX D

RESOLUTIONS

BE IT RESOLVED that we, the membership of the Arkansas Academy of Science, offer our sincere thanks to the University of Arkansas for Medical Sciences for hosting the 1998 meeting of the Arkansas Academy of Science. In particular, we thank the Local Arrangements committee, Wayne Gray, Chair, George Blevins, Parimal Chowdhury, Jim Daly, Kim Fifer, Cindy Kane, Lisa Maddox, Mark McCammon, Dorothy Miles and Michael Soulsby, and all the student workers and staff who collectively contributed to a very successful meeting. Appreciation is expressed for the use of the excellent facilities and the hospitality shown to us by all University of Arkansas for Medical Sciences personnel. We truly appreciate Dr. Gregory Wilson and his graphic presentation of "Space Science: NASA's Investment in America's Future."

"The Academy recognizes the important role played by the various section chairpersons and expresses sincere appreciation to John Bush and Joyce Hardin (Aquatic and Environmental Sciences/Invertebrate Zoology); Tom Kelly and Dennis Baeyens (Biomedical Sciences), Cesar Compadre, John Sorenson and Ali Shaikh (Chemistry); Robert Engleken, W.J. Braithwaite, Roger Hawk and Edwin Braithwaite (Physics/Physical Science); Marie Chow and Scott Kirkconnell (Microbiology); Stan Trauth and Gary Heidt (Vertebrate Zoology).

A special thanks is owed to individuals devoting considerable time and energy to judging student papers: Mostafa Hemmati, Richard Komoroski, Rudy Eichenber-

ger, Jeff Robertson, Jerry Webb, Victor Samokyszyn, Chidambaram Bhuvaneshwren, Lamar Setliff, Jay Gandy, Richard Kluender, Hershel Conway, David Wennerstrom, David Davies, Midhael Matthews, Robert Wiley and Clifton Orr.

The Academy appreciates UAMS for sponsoring the Friday evening social, the Arkansas Environmental Federation for funding the undergraduate presentation awards and Sigma Xi for funding the graduate presentation awards.

We express gratitude to the various directors of the science and youth activities which are supported and/or supervised by the Academy: Jim Edson (Chair of the Science Education Committee), Mike Rapp (Director of the Arkansas State Science Fair Association, Tom Palko, (Director of the Junior Science & Humanities Symposium, Steve Runge (Director of the Westinghouse/Arkansas Science Talent Search and Robert and Raynell Skinner (Co-directors of the Junior Academy of Science).

We wish to thank all those who served as directors at the regional science fairs and Junior Academy meetings: (see Appendix B).

The continued success of the Academy is due to leadership. We offer sincere thanks to our officers for another excellent year: James Daly (President), Rose McConnell (President-Elect), Mostafa Hemmati (Vice President), John Rickett (Secretary), Joyce Hardin (Treasurer), Richard Kluender (Past President), Stan Trauth (*Journal* Editor), David Saugey (*Newsletter* Editor) and Henry Robison (Historian). In addition, the Academy expresses appreciation to all who contributed time and effort on various committees of the Academy.

Finally, we congratulate all who presented papers and posters at this meeting. Student participants are especially recognized since their continued efforts and contributions will be directly responsible for the future success of the Academy and its programs for the continuing improvement and advancement of science education and research in Arkansas.

Respectfully submitted,
Mostafa Hemmati, Chair
Wayne Gray
Rudy Eichenberger

APPENDIX E

STUDENT AWARDS

Physics undergraduate:

Clayton Workman (ASU), "Improvement in the electroplating of CuInS₂"

Anthony Bednar (ASU), "Infrared laser spectroscopy of jet cooled molecules"

Candance Lindsey (ASU), "Infrared laser spectroscopy of jet cooled manganese pentacarbonyl halides"

Physics graduate:

Timothy Wofford (UALR), "A study of ruthenium oxide coating for use in thin film capacitors"

Richard Homard (UALF), "Low power diode lasers for raman spectroscopy"

Chemistry undergraduate:

James Sheets (UALR), "4-Nitrobiphenyls: synthesis and mutagenecities"

Kathy Herrin (Harding), "Tropospheric lifetime of hydrofluorocarbons"

Justin Scarbrough (ASU), "Stereoselective synthesis of beta-deuterated, leucine from, asymmetric reduction of isobutyraldehyde for use in solution-phase protein structure determination"

Life Sciences undergraduate:

Russell Robertson (Hendrix), "G proteins and calcium channels affect halothane sensitivity in *Caenorhabditis elegans*"

Brad Clark (UCA), "Differential gene expression in C3H-10T1/2 cells undergoing apoptosis due to intracellular acidification"

Kristy Jones (John Brown U.), "In vitro growth characteristics of two *Cryptococcus neoformans* isolates"

Life Science graduate:

Lisa Maddox (UAMS), "The role of inducible nitric oxide synthase during renal ischemia-reperfusion injury"

Allen Dye (UAMS), "Giardiasis in Arkansas: Age distribution and the *Giardia* season"

Chaojie Zhang (UAMS), "Angiotensin II signal activates the NO-cGMP pathway in rat proximal tubules"

Environmental Sciences undergraduate:

Lori Sale (ATU), "Coliform evaluation and source determination for the river valley waterways"

Chad Hargrave (UAF), "Current status of Arkansas darter (*Etheostoma cragini*) and least darter (*E. microperca*) in Arkansas"

Amy Hardwick (UAF), "The *Amoeba* biota of Piney Ditch Swamp, Monroe County, Arkansas"

Environmental Sciences graduate:

Robin Roggio (UAF), "Effects of agricultural practices on water quality and nutrient transport in two small watersheds, northwestern Arkansas"

Secretary's Report

MEMBERS 1997

FIRST MI	LAST NAME	INSTITUTION
Al	Adams	University of Arkansas at Little Rock
Max L.	Baker	University of Arkansas for Medical Sciences
Gene Lee	Bangs	University of Arkansas at Little Rock
Victor	Blunt	University of Arkansas at Pine Bluff
Frank	Bowers	University of Wisconsin-Stevens Point
Jimmy D.	Bragg	Henderson State University
Edwin S.	Braithwaite	Cedarville College
William D.	Brown	University of Arkansas at Fayetteville
Thomas	Buchanan	Westark Community College
John	Bush	University of Arkansas at Little Rock
Michael E.	Cartwright	Arkansas Game & Fish Commission
Stanley L.	Chapman	University of Arkansas at Fayetteville
Vincent A.	Cobb	Ouachita Baptist University
Joseph T.	Collins	University of Kansas
Lynita	Cooksey	Arkansas State University
Robert M.	Cordova	Arkansas Department of Health
Marc	Corrigan	University of Arkansas at Monticello
Betty	Crump	U.S.D.A., Forest Service
Donald	Culwell	University of Central Arkansas
James T.	Daniels	Southern Arkansas University
Perry A.	Daniels	Arkansas State University
Jerry A.	Darsey	University of Arkansas at Little Rock
Chris	Davidson	University of Arkansas at Pine Bluff
Patrick	Desrochers	University of Central Arkansas
Vipul	Dholakia	University of Arkansas at Pine Bluff
Peggy Rae	Dorris	Henderson State University
Rudolph J.	Eichenberger	Southern Arkansas University
David	Eller	University of Arkansas for Medical Sciences
Robert	Engelken	Arkansas State University
Don	England	Harding University
James	Engman	Henderson State University
Sheldon	Fitzpatrick	University of Arkansas at Pine Bluff
E. P. (Perk)	Floyd	U.S. Public Health Service
Thomas L.	Foti	Natural Heritage Commission
Charlie	Gagen	Arkansas Tech University
Joe P.	Gentry	Arkansas Science & Technology Authority
Rose	Gergerich	University of Arkansas at Fayetteville
Elizabeth M.	Getz	University of Central Arkansas
Wayne	Gildseth	Southern Arkansas University
Crissy Patterson	Goss	Hampton High School
Wayne L.	Gray	University of Arkansas for Medical Sciences
Reid	Green	U.S. Geological Survey
Earl L.	Hanebrink	Arkansas State University-retired
John L.	Harris	Arkansas Highway & Transportation Dept.
Michael J.	Harvey	Tennessee Tech University
Roger M.	Hawk	University of Arkansas at Little Rock
Marsha	Hendricks	Harding University
Kristine	Herbert	Westpark Community College
Larry R.	Hilburn	Black River Technical College
Lisa J.	Hlasek	U.S. Forest Service
Feng Hou	Huang	University of Arkansas at Fayetteville
Jim	Huey	University of Arkansas at Monticello
Martin	Huss	Arkansas State University
Philip E.	Hyatt	USDA, Forest Service
Joseph U.	Igietseme	University of Arkansas for Medical Sciences
M.D.	Jalaluddin	University of Arkansas at Pine Bluff
David	Jamieson	Arkansas State University-Beebe/Newport
James E.	Johnson	University of Arkansas at Fayetteville
Michael I.	Johnson	Nettleton High School
Hugh	Johnson	Southern Arkansas University
Thurman O.	Jordan	Arkansas Audubon Society
Jay	Justice	Arkansas Dept. Pollution Control & Ecology
Alvan A.	Karlin	University of Arkansas at Little Rock
Mark	Karnes	The Ross Foundation
Philip L.	Kehler	University of Arkansas at Little Rock
Scott W.	Kirkconnell	Arkansas Tech University
Maurice G.	Kleve	University of Arkansas at Little Rock
Richard	Kluender	University of Arkansas at Monticello
Roger E., II	Koeppe	University of Arkansas at Fayetteville
Randall A.	Kopper	Hendrix College
Timothy	Kral	University of Arkansas at Fayetteville
Norman	Lavers	Arkansas State University
Stephen A.	Leslie	University of Arkansas at Little Rock
Hal O.	Liechty	University of Arkansas at Monticello

FIRST MI	LAST NAME	INSTITUTION
Brian	Lockhart	University of Arkansas at Monticello
Daniel L.	Marsh	Henderson State University
John E.	Marshall	Biotechnical Services Inc.
H. Michael	Mathews	Henderson State University
Chris T.	McAllister	Texas Wesleyan University
Russell B.	McAllister	Arkansas Dept. Pollution Control & Ecology
Rose	McConnell	University of Arkansas at Monticello
V. Rick	McDaniel	Arkansas State University
David	Meeks	Westpark Community College
Richard	Meyer	University of Arkansas at Fayetteville
Muhammad A.	Miah	University of Arkansas at Pine Bluff
Cristin	Milam	Arkansas State University
Lawrence A.	Mink	Arkansas State University
Paul	Mixon	Arkansas State University
Warren	Montague	U.S. Forest Service
Cindy	Moore	Westark Community College
Leland F.	Morgans	University of Arkansas at Little Rock
Tom	Nelson	Eastern Illinois University
William F.	Nicholson	University of Arkansas at Monticello
Russell	Nordeen	University of Arkansas at Monticello
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Don R.	Owens	University of Arkansas at Little Rock
Bryan D.	Palmer	Henderson State University
Michael J.	Panigot	Arkansas State University
Mark A.	Paulissen	McNeese State University
John D.	Peck	University of Central Arkansas
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Jimmie	Pigg	Oklahoma Dept. of Environmental Quality
Michael V.	Plummer	Harding University
William R., II	Posey	Department Pollution Control & Ecology
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Scott W.	Reeve	Arkansas State University
Dennis J.	Richardson	Quinnipiac College
Jeff W.	Robertson	Arkansas Tech University
Joe	Rosen	University of Central Arkansas
Karen	Rowe	Arkansas Game & Fish Commission
Steven W.	Runge	University of Central Arkansas
Charles J.	Scifres	University of Arkansas at Fayetteville
John A.	Sealander	University of Arkansas at Fayetteville
Frank L.	Setliff	University of Arkansas at Little Rock
Larry	Seward	John Brown University
Elwood B.	Shade	University of Arkansas at Monticello
Ali U.	Shaikh	University of Arkansas at Little Rock
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Scott	Simon	Arkansas Natural Heritage Commission
Robert	Skinner	University of Arkansas for Medical Sciences
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Richard D.	Smith	Pulaski Tech College
Roy J.	Smith, Jr.	U.S.D.A./University of Arkansas
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Richard W.	Standage	U.S. Forest Service
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Eric	Sundell	University of Arkansas at Monticello
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Staria	Vanderpool	Arkansas State University
Brian	Wagner	Arkansas Game & Fish Commission
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Robert L.	Watson	University of Arkansas at Little Rock
James O.	Wear	V.A. Medical Center
Jerry	Webb	University of Arkansas at Monticello
Rayona	Webster	Cossatot Technical College
G. J.	Weidemann	University of Arkansas at Fayetteville
Robert	Weih	University of Arkansas at Monticello
Delores	Wennerstrom	Pulaski Academy
David	Wennerstrom	University of Arkansas for Medical Sciences
Todd	Wiebers	Henderson State University
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Heather L.	Woolverton	University of Central Arkansas
Dominic T.	Yang	University of Arkansas at Little Rock
J. Lyndal	York	University of Arkansas for Medical Sciences

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Edmond E. Dennis W.	Dale, Jr.	University of Arkansas at Fayetteville
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Clifton Joseph R.	Griffin	University of Central Arkansas
Paul C. Samuel	McMasters	Henderson State University
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	Sharraah	University of Arkansas at Fayetteville
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	Tendeku	University of Arkansas at Pine Bluff
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	Johnson	Hendrix College
	Kane	University of Arkansas for Medical Sciences
	Mattison	University of Pittsburgh
	McDaniel	FTN Associates, Ltd.
	Monoson	Ark. Science & Technology Authority
	Moore	University of Arkansas at Little Rock
	Northrop	Arkansas Tech University
	Palko	University of Arkansas at Little Rock
	Peck	University of Central Arkansas
	Rapp	University of Arkansas at Little Rock
	Rickett	Southern Arkansas University
	Robison	Southern Arkansas University
	Saughey	U.S. Forest Service
	Sewell	University of Mississippi
	Spears	Ouachita Mtns. Biological Station
	Spears	Ouachita Mtns. Biological Station
	Templeton	University of Arkansas at Fayetteville
	Trauth	Arkansas State University
	Tucker	FTN Associates
	Tumison	Henderson State University
	Wickliff	University of Arkansas at Fayetteville
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	Salisbury	University of Arkansas at Fayetteville
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	Skinner	University of Arkansas at Fayetteville
	Terry	Arkansas Tech University
	Torrez	University of Arkansas at Fayetteville
	Warford	Hendrix College
	Witsell	University of Arkansas at Little Rock
	Wofford	University of Arkansas at Little Rock
	Worley	Arkansas State University
	Young	University of Arkansas at Fayetteville