

## MINUTES OF THE MEETINGS OF THE INDIANA ACADEMY OF SCIENCE 2002

COMBINED MEETING OF THE  
EXECUTIVE COMMITTEE  
AND THE COUNCIL  
Butler University  
12 April 2002

President Terry West called the meeting to order at 2:00 PM with 21 members in attendance. Those attending were: Dick Conklin, Jeff Hughes, Dan Webster, Damian Schmelz, Uwe J. Hansen, Frank Guthrie, David Daniell, Donald Ruch, Edwin Squires, Jim Curry, Jim Berry, Holly Oster, Marcia Moore, William Gommel, Ruth Howes, Edward Frazier, Terry West, Robert Waltz, Marcia Gillette, Duvall Jones, Robert Dale.

Minutes from the Fall 2001 meeting were approved as proposed. Motion by Uwe Hansen, seconded by Ed Squiers. Secretary Nils Johansen was absent so Nelson Shaffer took notes.

Treasurer Ed Frazier presented an account summary of the budget with income from dues, interest, and contributions of \$12,909.60 and additional income from publications and returned grant money and a grant from the American Association for the Advancement of Science for a total of \$32,222.09. Operating expenses totaled \$66,668.22, leaving a deficit of \$34,446.13. An IRS audit of Academy book found that all was in order.

Executive Director Nelson Shaffer reported paid membership to date of 706 and gave a breakdown of membership categories. He also outlined initiatives to increase membership and public visibility of the IAS.

Jim Berry, Editor of the *Proceedings*, reported that Volume 110 was published and that Volumes 108/109 should be available soon. They will contain papers about the Grand Calumet River region. The matter of page charges was discussed, but no motions were made.

Newsletter editor Uwe Hansen reported that newsletters were produced on time and within budget. He complimented the printer, mail service, and Marilyn DeWees for their efforts. Uwe called for contributions to the newsletter, especially research results. Discussion of formats, inserts, and putting the newsletter on the IAS website ensued.

President-Elect Robert Waltz deferred his comments until new business.

President Terry West called for abstracts for the Fall Meeting. He noted the early abstract deadline

(August 26) and that meeting information is on the IAS website. He previewed the field trip to the reclaimed Kentucky Avenue landfill and the Martin Marietta Underground Mine.

### Committee Reports

Frank Guthrie of the Foundation Committee reported on the three accounts and that total assets had decreased about 7½% since December 2000. The Foundation account stood at \$6,751,000 on March 23. The Committee is working with account managers Merrill-Lynch to develop an investment policy with more diversity. The Committee wants to have \$160,000 per year to transfer to the Academy for Research Grants and Publications.

Jeff Hughes, Chair of the Grants Committee, noted that Paul Rothrock was awarded the Welch Award, and no spring applications were received for the Junior Academy grants. Senior Academy members tendered 36 applications requesting \$61,924. The Committee granted \$31,200 to 24 applications.

Ruth Howes, reporting for the Awards Committee, related that no nominations were made last year. New nomination forms are on the website. Discussion about qualifications for emeritus status resulted in no changes.

Programs and Invitation Chair David Daniell reported that the 2003 Fall meeting will be held at Anderson College around November 1. He called for potential sites for future meetings. He also gave details of the 2002 meeting to be held at Butler University on October 10-11. Abstracts will be due by August 26. All abstracts will be submitted electronically.

Dick Conklin of the Nominations and Elections Committee noted that nominees were need for President-Elect, two for the Grants Committee, and one for the Foundation Committee. Nomination forms are now on the website.

Bill McKnight, head of the Publications Committee, reported that *The Sunflower Family of the Midwest* book is out. Sales are good and he projects \$50,000 in sales. *Plants of the Chicago Region* is out of print, with all the original 5000 copies sold. They plan a revised version for 2003. The IAS book inventory is being moved to a safer storage site. He proposed making an agreement with R.G. Balkin

Books to put links to publications on their website to improve individual sales. Book in progress include *Sedges of Indiana*, *Mounds of Indiana*, *Cave Fauna*, and *Geology of Indiana*.

Don Ruch reported for the Biodiversity and Natural Areas Committee that Paul Rothrock was the Winona Welch Award for Botanical Biodiversity Research. The Committee will host two workshops at the Fall meeting. A workshop on Indiana sedges and other graminoids and a workshop about museum techniques for small collections will follow last year's successful darter identification efforts. The Indiana Biological Survey (INDG) website will come online this summer, and an electronic newsletter will be created. A motion to include corporate sponsors in IAS publications was referred to the Publications Committee.

The Junior Academy under Tina Gilliland will hold its annual meeting at Indiana University on November 15. A report about the 2001 meeting was tendered.

Holly Oster of the Library Committee noted that the State Library is moving and IAS items are packed and unavailable. She mailed the revamped *Proceedings* volume and is ready to mail volumes 108, 109, 110, and 111.

Marsha Gillette called for judges for the Science Talent Search to be held October 25–26 at Indiana University Kokomo.

Nelson Shaffer requested approval of a resolution acknowledging the hosts of the Fall Meeting at Butler and one recognizing an Indiana high school finalist in the national science talent search. Both were accepted.

Duvall Jones of the Youth Activities Committee discussed improvement of the high school grant procedure and that for teacher fellowships.

Marsh Moore reported on the latest IAS website improvements.

Damian Schmelz reported for the Natural Resources Commission that John Gross is the new leader of DNR. There is concern about State budgets. The new State Museum will open May 22.

Richard Kjonaas, IAS representative to the AAAS, reported on the annual meeting in Boston where a resolution about cloning was passed. A commercial firm, Ingenta, is seeking to include state academy journals on its website. This possibility was referred to the *Proceedings* editor.

Historian William Gommell called for resumes of current members. He reported the passing of three IAS fellows, 1) James B. Kock of Earlham, 2) Ernest M. Schull of North Manchester, and 3) Harry M. Galloway of Purdue University. A moment of silence in their honor was observed.

#### New Business

President-Elect Bob Waltz suggested five initiatives. He plans to evaluate the five-year plan to im-

prove Academy operations which was begun under Ruth Howes. He suggested that the time has come for a State-wide Invasive Species Council. He also will seek to better recognize volunteer services of Academy members. Section chairs will be encouraged to show leadership in communications about their disciplines. Finally, improvements in newsletter presentation will be investigated.

President Terry West thanked attendees and adjourned the meeting shortly after 4:00 P.M.

#### EXECUTIVE COMMITTEE

Butler University  
10 October 2002

President Terry West called the meeting to order at 1:04 P.M. Attending: Edward Frazier, Treasurer; Nils I. Johansen, Secretary; Jim Berry, Editor of the *Proceedings*; Frank Guthrie, Foundation Chair; Bob Waltz, President-Elect; Nelson Shaffer, Executive Director; Uwe Hansen, Newsletter editor; Duvall Jones, Bill McKnight, Holly Oster, Jeff Hughes.

**Approval of agenda.**—Agenda approved. Council meeting not included at this time.

**Approval of minutes.**—Minutes from Spring meeting at Butler University approved as corrected. Unanimous approval. The Secretary appreciated that the Executive Director had taken notes in the Secretary's absence.

**Treasurer's report.**—Frazier passed out financial reports. The deficit in operating budget up to \$15,000 for a five year period will be covered by funds from the Foundation.

**Executive Director's report.**—"We are holding our own, i.e., 809 members total." Concern: Corporate members. Nelson Shaffer stressed the need to explore this further. Corporate dues are \$250 per year. Some discussion ensued on how to increase membership, but no specific action taken. The current term of the Executive Director is up, and he is willing to continue. Possible renewal will be taken up at the budget meeting in December.

**Proceedings Editor's report.**—Berry reported that we are again being listed by the major indexing services. Two regular issues for 2002 (will include minutes for 2000 and 2001). Volumes 108/109 will be mailed out soon. Turn-around time for accepted manuscripts is about one-half year.

**Newsletter Editor's report.**—Main concern is deadlines. Deadlines will be adjusted to fit the IAS calendar.

**Secretary's report.**—Johansen again thanked Nelson Shaffer for taking minutes at the previous meeting.

**President-Elect's report.**—Submitted written report. Waltz has met with Nelson Shaffer *re.* program issues. Discussion followed regarding the role and use of Section Chairs. One suggestion was that Section Chairs give information on their sections to the Newsletter Editor. Feedback requested on this.

Another discussion issue was whether IAS should have an institutional representative at each institution and State agency. Feedback requested.

**President's report.**—West submitted written report. He expressed appreciation for the use of the 'President's Column' in the Newsletter.

#### Committee Reports

**Academy Foundation report.**—Guthrie submitted a written report.

**Research Grant report.**—Hughes reported that 20 grant applications were received, and 13 were approved for a total of \$23,489. There are 27 Junior Academy applications pending. It was noted that 24 of these applications came from three high schools.

The total budget for the Junior Academy grants is \$5,000. Waltz suggested recognizing Duvall Jones for his work with IAS. The awards committee will send its nomination to the IAS Council. Some discussion followed.

**Adjourn.**—Meeting adjourned at 3:03 P.M.

Respectfully submitted,  
Nils I. Johansen, P.E.  
Secretary

#### COUNCIL MEETING

Butler University  
10 October 2002

President Terry West called the meeting to order at 3:21 P.M. Attending: Edward Frazier, Treasurer; Nils Johansen, Secretary; Jim Berry, Editor of the *Proceedings*; Frank Guthrie, Academy Foundation Chair; Bob Waltz, President-Elect; Nelson Shaffer, Executive Director; Duvall Jones, Youth Activities Chair; Bill McKnight, Publications Committee Chair; Holly Oster, Librarian; Uwe Hansen, Newsletter Editor; Jeff Hughes, Research Grants Chair; Marcia Moore, Web Site Coordinator; Rebecca Dolan, Past-President; John Schutt, Speaker of the Year Committee; Dave Daniell, Local Arrangements and Programs Chair; Stan Shimer, Botany Section Chair; Blake Janutolo; Don Ruch, BNC Chair; Dick Conklin, Nominations and Elections Chair; William Gommel, Historian; Richard Kjo-naas, AAAS Representative.

**Approval of minutes.**—Minutes from the Spring Meeting at Butler University approved as corrected. Unanimous approval. The Secretary expressed appreciation to the Executive Director for taking minutes in the Secretary's absence.

**Approval of agenda.**—Agenda approved as presented.

**Treasurer's report.**—Frazier passed out financial reports. The deficit in the operating budget is to be covered by up to \$15,000 per year for a five year period from the Foundation funds.

**Executive Director's report.**—"We are holding our own, i.e., 809 members total." Concern: Corporate members. Shaffer stressed the need to ex-

plore this further. Corporate dues are \$250 per year. Some discussion ensued on how to increase membership, but no specific action taken. Shaffer noted that the current term of the Executive Director is up, and he is willing to continue in office. Possible renewal will be taken up at the budget meeting in December.

**Proceedings Editor's report.**—Berry reported that the *Proceedings* is again being listed by the major indexing services. There will be two regular issues for 2002, and will include the Academy minutes for 2000 and 2001. Volumes 108/109 will be mailed out soon. Turnaround time for manuscripts in the *Proceedings* is about ½ year.

**Newsletter Editor's report.**—The main concern is deadlines. Deadlines will be adjusted to fit the IAS calendar.

**Secretary's report.**—Johansen noted that Nelson Shaffer had taken minutes at the previous meeting.

**President-Elect's report.**—Submitted written report. Waltz has met with Nelson Shaffer regarding program issues. Discussion followed regarding the role and use of Section Chairs. One suggestion was that Section Chairs give information on their sections to the Newsletter Editor. Feedback requested on this. Another discussion issue: Should the IAS have an institutional representative at each institution and State agency? Feedback is requested.

The Annual Budget Meeting will be 9 November at Butler University at 10 AM.

Conklin moved, Berry seconded, that Duvall Jones receive a Special Service award. Approved.

**President's report.**—West submitted a written report. He expressed appreciation for the use of the 'President's Column' in the Newsletter.

#### Committee Reports

**Academy Foundation report.**—Guthrie submitted a written report.

**Amendments.**—Hansen suggested that the process for election to Emeritus Member be simplified to: Age 65, retired, 25 or more years of membership. These points, when verified by the Executive Director, would automatically make a member an Emeritus Member if he or she so desired. The vote/comments would be taken up at the Spring Meeting 2003.

**Awards.**—Shaffer read the report from Howes: Distinguished Scholar: Harry G. Day; Fellow: James Bandoli, Christian Johannsen, Shrikrishna Dhawale; Emeritus: Chris Ault, Winifred Caponigri, Jon Hendrix, Uwe Hansen, Benjamin Swartz. Unanimous approval.

**Research Grants.**—Hughes reported that 20 grant applications were received, and 13 were approved for a total of \$23,489. There are 27 Junior Academy applications pending. Note that 24 of these applications came from three high schools. The total

budget for the Junior Academy grants is \$5000. Waltz suggested recognizing Duvall Jones for his work for the Junior Academy of the IAS. The Awards Committee will send his nomination to the IAS Council. Some discussion followed.

**Programs and invitations.**—The Spring and Fall meetings in 2003 will be at Anderson University. The dates are 4-5 April and 16-17 October 2003.

**Nominations and elections.**—The election results are: Frazier – Treasurer; Guthrie – Foundation; Don Ruch – President-Elect; David Hicks – Research grants. Next year's openings: President-Elect, Secretary, Research Grants, Foundation.

**Publications.**—McKnight summarized the current activities. He was asked to look into corporate sponsorship and page charges and report back at the next meeting.

**Finance.**—IRS audit was passed.

**Resolution.**—A resolution thanking Butler University for hosting the meeting was read and approved for presentation at the general membership meeting.

**Youth activities.**—There was a written report from Jones.

**Library.**—Oster reported on the status of the State Library and IAS' place therein.

**Biodiversity.**—Members were reminded about the special sessions and workshop at the Fall Meeting.

**Web site.**—It is up and running. The Council instructed Executive Director to poll the members *re.* inclusion in an electronic membership directory. (Nelson moved, Ruch seconded, approved, with one nay.)

**Speaker of the Year.**—Schutt needs names of potential candidates for Speaker of the Year for 2003.

**AAAS report.**—Kjonaas will attend the AAAS meeting in February 2003.

**Historian.**—Gommel read the names of members who have passed away over the last year.

#### New Business

The Council directed the Executive Director to look into guidelines regarding corporate members. The budget for this should not exceed \$1000. (Nelson moved, Johansen seconded, approved).

The Council thanked Duvall Jones for his service to the Youth Activities Committee.

The meeting adjourned at 6:02 PM.

Respectfully submitted,  
Nils I. Johansen, P.E.  
Secretary

INDIANA ACADEMY OF SCIENCE  
2002 Year End Financial Report

	Balance 1-Jan-02	Revenues	Expenses	Balance 31-Dec-02
<b>OPERATING FUND</b>	6,050.46			7,851.37
Dues		18,000.00		
Interest		1,227.13		
Contributions		215.00		
Spring Meeting		375.00	373.00	
Annual Meeting		6,651.00	7,921.67	
Transfer from IAS Foundation		9,000.00		
Misc. Income		730.00		
Officer's Expenses			4,000.00	
Operating Expenses			6,278.82	
Financial Expenses			1,026.00	
Newsletter Expenses			3,876.62	
Library Operations			0.00	
Committee Expenses			0.00	
Speaker of the Year			835.00	
AAAS Representative			875.00	
Web Site Development			1,000.00	
Youth Activities			8,211.11	
Operating Fund Total	6,050.46	36,198.13	34,397.22	7,851.37
<b>RESTRICTED FUNDS</b>				
Proceedings	38,830.08	17,421.77	38,101.14	18,150.71
Publications	(804.06)	75,866.68	61,655.19	13,407.43
* Research Grants	8,704.33	68,706.09	63,207.45	14,202.97
Indiana Biological Survey	0.00	2,000.00	2,000.00	0.00
Lilly Library	6,578.44	0.00	0.00	6,578.44
Welch Fund	9,906.01	0.00	400.00	9,506.01
Life Members Fund	3,795.25	500.00	0.00	4,295.25
Past Presidents Fund	9,178.39	0.00	0.00	9,178.39
Total Restricted Funds	76,188.44	164,494.54	165,363.78	75,319.20
Prepaid 2003 Dues				4,255.00
<b>TOTAL FUNDS</b>	<b>82,238.90</b>	<b>200,692.67</b>	<b>199,761.00</b>	<b>87,425.57</b>
<b>FUNDS ON DEPOSIT</b>				
Checking Account	14,262.86	191,460.59	200,398.00	5,325.45
Money Market Savings	57,854.32	100,209.42	87,020.00	71,043.74
Cert. of Deposit	10,121.72	934.66	0.00	11,056.38
<b>TOTAL FUNDS DEPOSITED</b>	<b>82,238.90</b>	<b>292,604.67</b>	<b>287,418.00</b>	<b>87,425.57</b>
* Provided 36 senior member grants, 16 high school grants and 2 high school teacher fellowship				
<b>ACADEMY FOUNDATION FUNDS</b>				
John S. Wright Fund Account	6,258,529.00			5,990,130.00
Academy Fund Account	207,840.00			225,284.00
Invested Income Account	176,527.00			230,011.00
<b>TOTAL FOUNDATION FUNDS</b>	<b>6,642,896.00</b>			<b>6,445,425.00</b>
<b>Foundation Funded Used For:</b>				
General Fund	9,000.00			
Proceedings	5,912.56			
Publications	42,555.03			
Research Grants	66,271.80			
Total	123,739.39			
			Edward L. Frazier	
			Treasurer	

## INSTRUCTIONS TO AUTHORS

(revised October 2001)

**General information.**—Manuscripts and all correspondence should be sent to the Editor. To be eligible for publication in the *Proceedings*, at least one author must be a member of the Academy. Papers that have been presented at an Academy meeting may be given preference for publication. Submission of a manuscript to the Editor implies that it has not been sent to another publication, nor has it been published elsewhere. If it is accepted for publication in the *Proceedings*, it may not be republished without the written consent of the Academy.

All manuscripts are evaluated by referees. Submit three copies of the manuscript. Figures in manuscripts for review may be submitted as photocopies, and they should be approximately the size that they will be printed in the *Proceedings*.

After the manuscript has been accepted, the author will be asked to submit the manuscript as a paper copy and on a computer disc in a widely-used word processing program. Indicate clearly on the computer disc the **word processing program** and the **type of computer** (Mac or PC).

Galley proofs will be sent to the primary author for approval and correction.

**Style.**—Do not use right or full justification. Also, use a non-proportional font (e.g. Courier, but not Times Roman).

**Title page.**—The title page should include (1) the title in capital letters, (2) each author's name and address, (3) the running head (see below), and (4) the complete name, address, and telephone number of the author with whom proofs and correspondence should be exchanged, a FAX number and electronic mail address if available.

**Abstract.**—All manuscripts have an abstract, which should summarize the significant facts in the manuscript. The "ABSTRACT" heading in capital letters should be placed at the beginning of the first paragraph set off by a period. Use complete sentences, and limit the abstract to one paragraph and 250 words.

**Keywords.**—Give 3–5 appropriate keywords following the abstract.

**Text.**—Double-space text, tables, legends, etc. throughout. Three categories of headings are used. The first category (METHODS, RESULTS, etc.) is typed in capitals, centered, and on a separate line. The second (lower) category of heading, in bold type, begins a paragraph with an indent and is separated from the text by a period and a dash. (This paragraph begins with an example of this heading.) The third heading category may or may not begin a paragraph, is italicized and followed by a colon. (The paragraph below is an example.) Use only the metric system unless quoting text or referencing collection data.

**Citation of references in the text:** Cite only papers already published or in press. Include within parentheses the surname of the author followed by the date of publication. A comma separates multiple citations by the same author(s) and a semicolon separates citations by different authors, e.g., (Smith 1990), (Jones 1988; Smith 1993), (Smith 1986, 1987; Smith & Jones 1989; Jones et al. 1990).

**Literature cited section.**—Use the following style, and include the full unabbreviated journal title. Repeat the name for multiple references by the same author. Note that book titles have the first letter of each word capitalized.

Walter, J. & B. Hallet. 1979. Geometry of former subglacial water channels and cavities. *Journal of Glaciology* 23:335–346.

Walter, J. 1992. The significance and complexity of communication in moths. Pp. 25–66. *In* *Insect Communications: Mechanisms and Ecological Significance*. (P.N. Work & J.S. Rivers, eds.). Princeton University Press, Princeton, New Jersey.

**Footnotes.**—Footnotes are permitted only on the first printed page to indicate current address or other information concerning the author. These are placed together on a separate page at the end of the manuscript. Tables and figures may not have footnotes.

**Running head.**—The author's surname(s) and an abbreviated title should be typed all in capital letters and must not exceed 60 characters and spaces. The running head should be placed near the top of the title page.

**Tables.**—These should be typed double-spaced, one table to a page and numbered consecutively. Most tables contain only three horizontal lines (see recent issues for examples). Do not use vertical lines or shading. Include all pertinent information in the table legend (no footnotes).

**Illustrations.**—All art work must be camera-ready (mounted and labeled) for reproduction. Figures should be arranged so that they fit (vertically and horizontally) the printed journal page, either one column or two columns, with a minimum of wasted space. When reductions are to be made by the printer, pay particular attention to width of lines and size of lettering in line drawings. Multiple photos assembled into a single plate should be mounted with only a minimum of space separating them. In the case of multiple illustrations mounted together, each illustration must be numbered Fig. 1, Fig. 2, etc.) rather than given letter (A.B, etc.) designations. The name(s) of author(s), and an indication of top edge, and whether the illustration should be one or two columns wide, should be written on the back of the illustration. The overall dimensions should be no more than 11 inches (28 cm) × 14 inches (36 cm). Larger drawings present greater difficulty in shipping and greater risk of damage for which the *Proceedings* assumes no responsibility. In manuscripts for review, photocopies are acceptable, and should be reduced to the exact measurements that the author prefers in the final publication. Make notations in the text margins to indicate the preferred position of illustrations in the printed text. Color plates can be printed; but the author must assume the full cost, currently about \$600 per color plate.

Legends for illustrations should be placed together on the same page(s) and separate from the illustrations. Each plate must have only one legend, as indicated below:

Figures 1–4.—Right chelicerae of species of *Centruroides* from Timbuktu. 1. Dorsal view; 2. Prolateral view of moveable finger; 3. *Centruroides* holotype male; 4. *Centruroides* male. Scale = 1.0 mm.

**Page charges and reprints.**—Page charges are currently \$10 per journal page for members of the Academy and \$70 per page for non-members. Corrections in proof pages must be restricted to printer's errors only; all other alterations will be charged to the author (currently \$3 per line).

Reprints are available only from the Allen Press and should be ordered (with payment) when the author receives the proof pages. Allen Press will not accept reprint orders after the paper is published.

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