

NEWSLETTER OF THE ALASKA CHAPTER
OF THE
AMERICAN STATISTICAL ASSOCIATION

July 22, 1987

1987 ANNUAL MEETING

The meeting will be held this year in Juneau. We have an excellent program lined up. The primary thrust of this year's program is bootstrapping. The meeting is planned for Wednesday, September 30 through Thursday, October 1. Prior to the meeting we will be sponsoring the ASA video short course titled "An Introduction to Bootstrapping" by Drs. Bradley Efron and Robert Tibsharani. The short course may be held in conjunction with the University of Alaska, Juneau. The planned times for the short course are the afternoon of Monday, September 28 through the morning of Wednesday, September 30. The short course is open to all interested parties for a reasonable fee. Questions regarding the short course should be directed to Allen Bingham (267-2327).

At the annual meeting we have invited Dr. Stephen Buckland (University of Aberdeen, Scotland, and the Inter-American Tropical Tuna Commission, La Jolla, California) to speak to us. He will present two talks regarding applications of the bootstrap. The titles with an abstract of his talks as well as the tentative schedule for the short course and meeting are included as an insert to this newsletter. A select list of Dr. Buckland's publications is also included. Prior to the Juneau meetings Dr. Buckland will be giving presentations in Fairbanks on campus. Questions regarding the Fairbanks presentations should be directed to Dana Thomas (474-6103).

Inquiries regarding the annual meet-

ing preparations should be directed to Allen Bingham (267-2327). Gordon Kruse (465-4210) has graciously accepted the assignment of "local" arrangements chairman for the Juneau meeting. Gordon will be developing a list of pertinent information regarding local accommodations. A final schedule for the short course and meeting, as well as the list prepared by Gordon will be mailed out to members shortly before the meeting.

REPORT FROM THE PRESIDENT

Several proposals to amend the current constitution were made at the November 1986 chapter meeting. The amendments dealt with changing the way in which officers are elected. Included as an insert to this newsletter is a copy of the current constitution and bylaws, along with the proposed amended versions. These amendments will be voted on at the 1987 chapter meeting, scheduled for this fall. An affirmative two-thirds vote of the full and associate members present at the meeting will be required to amend the constitution.

COUNCIL OF CHAPTERS

Your chapter representative needs to know of any concerns, which should be brought up at the annual National ASA meeting in August. Send your concerns and comments by August 5, to Alan Johnson, 211 Mission Road, Kodiak, AK 99615. Please send a copy to the Chapter President, Earl Becker, 333 Raspberry Road, Anchorage, AK 99518-1599.

SHORT COURSE IN TIME SERIES

This past winter the Chapter sponsored a continuing education videotape entitled "Forecasting and Applied Time Series Analysis" by Johannes Ledolter and Bovas Abraham (1984). The short course video was viewed by 20 in Juneau and 9 people in Anchorage. As a result, \$1,160 was raised and new and renewing members were added through this exposure. The Chapter wishes to thank Terry Quinn and Bob Marshall of the University of Alaska Juneau for co-hosting and narrating the Juneau showing. It was offered in connection with UAJ for one credit with completion of a project paper. We understand that some of the projects were quite interesting.

MEMBERSHIP DIRECTORY

The Alaska Chapter of ASA is required by its constitution to publish a membership directory at least every five years. The first such directory was published when the Chapter was organized in 1982. The goal for publication of the second directory is this fall. Hopefully it can be distributed at our next meeting.

Survey forms were sent with the October 6, 1986 newsletter and the response thus far has been good. If you feel you may not have returned a survey and wish to be in the directory please contact Linda Brannian (see section on dues for address).

DUES

Please note that the number next to your name on the mailing label is the last year for which we have received dues and the letter represents the type of membership (R=Regular, S=Student). Please renew your membership. Dues may be sent to Linda Brannian, ADF&G Div. CF, 333 Raspberry Rd., Anchorage, AK 99518 or included with your membership dues for the national organization. Regular membership is \$10 and \$1 for students, make checks payable to AK ASA, and send to Linda Brannian.

CHAPTER OFFICERS

OFFICE	NAME	PHONE NUMBER
PRESIDENT	EARL BECKER	267-2407
V PRESIDENT	ALLEN BINGHAM	267-2327
SECR./TREAS.	LINDA BRANNIAN	267-2118

TENTATIVE SCHEDULE FOR 1987 ANNUAL MEETING AND SHORT COURSE

DATE	TIME	EVENT
SEPTEMBER 28	AFTERNOON	SHORT COURSE ON BOOTSTRAPPING
SEPTEMBER 29	ALL DAY	SHORT COURSE ON BOOTSTRAPPING (continued)
SEPTEMBER 30	MORNING	SHORT COURSE ON BOOTSTRAPPING (continued)
SEPTEMBER 30	AFTERNOON	ANNUAL BUSINESS MEETING
		<p>TALK BY DR. STEPHEN BUCKLAND: "Bootstrap standard errors and confidence intervals". The bootstrap method is described, and several types of bootstrap confidence interval methods are compared. Advantages relative to both the jackknife and analytic methods are discussed. Two kinds of asymptotically exact confidence intervals are considered, one using the bootstrap technique and the other using permutation tests.</p> <p>Round Table Discussion on Applications of Bootstrapping. Proposed Panel: Dan Reed (Chairman), Bob Conrad, and Alan Johnson. Each panel member will give a short presentation on a recent application of the bootstrap method. This will be followed by an open question and answer session.</p>
OCTOBER 1	MORNING	<p>TALK BY DR. STEPHEN BUCKLAND: "Applications of the bootstrap to quantify precision in the field of animal abundance estimation". Examples from mark-recapture, line transect sampling and circular plot sampling are used to illustrate both the parametric and the nonparametric bootstrap. Problems discussed will include the estimation of: the size of ant colonies; the parameters of the Jolly-Seber model; survival rates of fulmars and gulls; trends in abundance of dolphins in the eastern tropical Pacific; and densities of songbirds.</p> <p>Round Table Discussion on Economic Surveys. Proposed Panel: Mike Thomas (Chairman), Mike Mills, and Suzanne Miller. Each panel member will give a short presentation on a recent application of the bootstrap method. This will be followed by an open question and answer session.</p>
	NOON	NO-HOST LUNCHEON
	AFTERNOON	<p>Round Table Discussion on Applications of Mark Recapture. Proposed Panel: Earl Becker (Chairman), Linda Brannian, and Hal Geiger. Each panel member will give a short presentation on a recent application of the bootstrap method. This will be followed by an open question and answer session.</p> <p>Open Forum. Members wishing to give a short talk (15 minutes) on either recent work or a problem they found interesting (seemingly unsolvable?) are urged to do so at this time.</p>

SELECTED PUBLICATION LIST OF STEPHEN BUCKLAND

- Buckland, S. T. 1987. On the variable circular plot method of estimating animal density. *Biometrics* 43:363-384.
- Buckland, S. T. 1986. Calculation of Monte Carlo confidence intervals. *Applied Statistics* 34:296-301.
- Buckland, S. T. 1985. Perpendicular distance models for line transect sampling. *Biometrics* 41:177-195.
- Buckland, S. T. 1984. Monte Carlo confidence intervals. *Biometrics* 40:811-817.
- Buckland, S. T. 1983. Monte Carlo methods for confidence interval estimation using the bootstrap technique. *BIAS* 10:194-212.
- Buckland, S. T. 1983. Examination and extension of statistical methodology for estimating animal abundance. Ph.D. thesis, University of Aberdeen, Scotland.
- Buckland, S. T., I. C. R. Rowley, and D. A. Williams. 1983. Estimation of survival from repeated sightings of tagged galahs. *Journal of Animal Ecology* 52:563-573.
- Buckland, S. T. 1982. Statistics in ornithology. *Ibis* 124:61-66.
- Buckland, S. T. 1982. A note on the Fourier series model for analyzing line transect data. *Biometrics* 38:469-477.
- Buckland, S. T. 1982. A mark-recapture survival analysis. *Journal of Animal Ecology* 51:833-847.
- Buckland, S. T. 1980. A modified analysis of the Jolly-Seber capture-recapture model. *Biometrics* 36:419-435.
- Buckland, S. T., and A. G. Knox. 1980. Brambling breeding in Scotland. *British Birds* 73:360-361.
- Buckland, S. T. 1977. The estimation of survival parameters from repeated sightings of tagged galahs. M.Sc. thesis, University of Edinburgh.

CONSTITUTION OF THE ALASKA CHAPTER
AMERICAN STATISTICAL ASSOCIATION
6/87

ARTICLE I - NAME

This organization shall be known as the Alaska Chapter of the American Statistical Association.

ARTICLE II - PURPOSE

The purpose of this organization shall be to foster, in the broadest manner, statistics and its applications, and to promote unity and effectiveness of effort among all people in the state of Alaska having an interest in or being concerned with statistical problems.

ARTICLE III - MEMBERSHIP

Membership of this organization shall consist of two classes:

1. Full members : Persons holding membership in the American Statistical Association.
2. Associate Members : Persons interested in statistics in general or this organization in particular, who are not members of the American Statistical Association.

ARTICLE IV - OFFICERS

Officers of the organization, who shall be Full members, shall be President, Vice President, and Secretary-Treasurer. Officers shall be duly elected during the annual business meeting. The Executive Committee shall fill vacancies in any office which may occur between elections.

ARTICLE V - EXECUTIVE COMMITTEES

The Executive Committee shall consist of officers under Article IV, two members to be elected during the annual business meeting, and Chairman of each standing committee. Meetings of the Executive Committee shall be held whenever called by the President, or requested by a majority of committee members.

ARTICLE VI - COMMITTEES

Committees of the organization shall consist of standing committees for program membership, and such special committees as may be appointed by the President. Members of the standing committees shall serve until their successors are appointed. Chairpersons of the standing committees shall be elected by appointed members of those committees.

ARTICLE VII - MEETINGS

There shall be at least two regular meetings per year; including one annual business meeting during which election of officers shall be held.

ARTICLE VIII - NATIONAL CONSTITUTION

Any and all provisions of the Constitution of the American Statistical Association shall be considered included herein for use where applicable and necessary.

ARTICLE IX - AMENDMENTS

This Constitution may be amended by an affirmative two-thirds vote of the Full and Associate members present at any meeting of this organization, provided notices of such meeting and of the proposed amendment to be voted upon have been distributed at least two weeks before the meeting. Amendments to the national constitution acted upon and passed by the Board of Directors of ASA shall be herein included.

**BYLAWS OF THE ALASKA CHAPTER
AMERICAN STATISTICAL ASSOCIATION
6/87**

ARTICLE I - MEMBERSHIP

1. Membership year. If an application for membership is favorably acted upon prior to July 1 in any year, membership shall be dated back to January 1 of that year. The new member shall be liable for dues and publications for the current year.

If application for membership is favorably acted upon on or after July 1, membership shall take effect as of July 1 of that year. The new member is liable for dues for only the latter half of the current year. If the applicant chooses to pay dues for the full year, membership and its privileges shall begin as of January 1.

2. Full and Associate Membership. Regular members shall be Full members of the American Statistical Association. All other Chapter members shall be Associate members. Dues shall be the same for Full and Associate members. Privileges, except for the holding of office, shall be the same for all Chapter members.
3. Resignation. A member may resign from the Chapter by notifying the Secretary. There shall be no reimbursement of dues.

ARTICLE II - FINANCE

1. Dues and Subscriptions. The Executive Board shall have the responsibility of drawing up the schedule of membership dues and subscription rates, for the approval by the Chapter members at the annual business meeting.
2. Fiscal year. The fiscal year shall be the calendar year.
3. Financial Authority. All funds of the Chapter shall be deposited with the Secretary-Treasurer, who shall make disbursements under regulation of the Executive Board. The President shall also have the authority to make disbursements from Chapter accounts under regulation of the Executive Board.
4. Financial relationship with Members. The Chapter shall not be responsible for the debts or expenses of any of its members or units unless such debts or expenditures are authorized by the Executive Board or its designee.

All services from the Chapter to any member or unit shall be by mutual agreement.

ARTICLE III - PUBLICATIONS

1. Directory. At least once every five years, a directory of all responding statisticians in Alaska shall be published.
2. Newsletter. A newsletter editor shall be appointed by the Executive Board. The newsletter is to be published quarterly.

ARTICLE IV - MEETINGS

1. Annual Business Meeting. Election of officers and other business will be carried out at a business meeting, held in conjunction with an appropriate scientific or professional meeting.
2. Requests for Meetings. Meetings may be requested by any member of the Chapter by contacting the President or his designee at least thirty days before the proposed meeting date. Announcements of approved meetings will be distributed as promptly as possible.
3. Operation of business Meeting. The Chairperson of the Executive Board shall preside over the annual business meeting. On all matters which are called on to vote the Chair will abstain, voting only in the case of a tie.

ARTICLE V - AMENDMENTS TO THE BY-LAWS

1. Proposal. Amendments to the By-Laws may be proposed by the Executive Board or by petition signed by five members. An amendment originating by petition shall be referred to the Executive Board for its recommendation as to ratification.
2. Ratification. A two-thirds affirmative vote of the members voting by mail ballot shall be required for ratification.

PROPOSED AMENDMENTS TO THE CONSTITUTION OF THE ALASKA CHAPTER
AMERICAN STATISTICAL ASSOCIATION
TO BE VOTED ON AT THE ANNUAL 1987 MEETING

Under the proposed amendment to the constitution, Article IV, which deals with the election of officers will be amended to read as follows:

ARTICLE IV - OFFICERS

Officers of the organization, who shall be Full members, shall be President, Vice president, Secretary-Treasurer. The Secretary-Treasurer will be elected for two years. The office of Vice President will be elected yearly, and the Vice President will become President during the second year.

Under the proposed amendment to the constitution, Article V, which deals with the executive committees will be amended to read as follows:

ARTICLE V - EXECUTIVE COMMITTEE

The Executive Committee shall consist of officers under Article IV, one member to be elected during the annual business meeting, the previous President, and the Chairman of each standing committee. Meetings by the Executive Committee shall be held whenever called by the President, or requested by a majority of committee members.