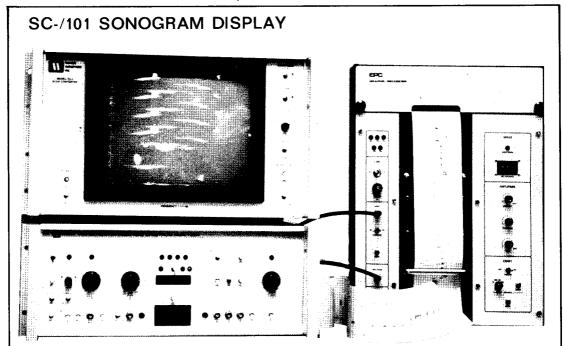
### MODEL BC-1



### WATERFALL SONOGRAM FREQUENCY

### **ANALYSIS SYSTEM**

P. O. Box 9999 • Mt. Vernon, NY 10551 • 914/699-7545



### 4512/101 SPECTRUM ANALYZER

### RC-1 RECORDER

Model BC-1 is an integrated, high speed frequency analysis system which provides a real time image of the sonogram as it unfolds from a tape or a live signal and a hard copy record from a high speed recorder. The system is capable of displaying sonograms of fast moving signals on a 12 inch diagonal screen with a time resolution of up to 8 milliseconds and a frequency resolution of 128 spectral lines in a three dimensional "B" scan display of frequency vs. time vs. amplitude (16 shades of grey). A hard copy recorder provides a continuous record of the sonogram without interuption of the tape with a maximum time resolution of 10 milliseconds and a corresponding frequency resolution of 128 frequency lines. In addition the recorder can be used in the 512 frequency line resolution mode of the analyzer with a maximum time resolution of 40 milliseconds.

The hardcopy sonogram is produced on a 3½ inch wide paper with an instantly appearing black on white image. Paper speeds vary from 200 to 75 lines per inch, with the actual sweep speed per line settable at 10, 20, 50 and 100 ms for 128 spectral lines, and 40, 80, 200, and 400 ms for 512 spectral lines. Single sweep "A" scan spectral analysis can be viewed at the same time on a separate scope. Digital output is available simultaneously. All the standard features of the model 4512/101 analyzer are available. The optional band zoom frequency translator can be used for resolution magnification as well as extending the frequency capability of the system to 512 kHz.

Normal configuration of the BC-1 system is a model 4512/101 spectrum analyzer with a model SC-1/101 scan converter display and a model RC-1 hard copy recorder. The signal or tape is previewed with the 12 inch diagonal display of the SC-1/101, and if hard copy is desired then the RC-1 recorder is used.

### (Continued from outside back cover)

Food Sampling Biases Associated with the "Ligature Method" ELLEN J. JOHNSON, LOUIS B. BEST and PATRICIA A. HEAGY 186
Birds Feeding on Herring Eggs at the Yaquina Estuary, Oregon RANGE D. BAYER
A Numerical Approach to the Analysis of Solitary Vireo Songs STEVEN MARTINDALE
Hurricane Fifi and the 1974 Autumn Migration in El Salvador WALTER A. THURBER
Nitrogen Excretion by Turkey Vultures F. M. ANNE McNABB, ROGER A. McNABB, IRVINE D. PRA- THER, RICHARD N. CONNER and CURTIS S. ADKISSON 219
SHORT COMMUNICATIONS
Removal of Primary Remiges and Its Effect on the Flying Ability of Glaucous-winged Gulls NICOLAAS A. M. VERBEEK and JOAN L. MORGAN
Raptor Hematocrit Values SAMUEL R. HUNTER and LEON R. POWERS
Characteristics of the Razor-billed Curassow (Mitu mitu mitu) HELMUT SICK
Midwinter Breeding by Some Birds in the High Andes of Southern Perú R. A. HUGHES
Food Habits of the Bald Eagle in North-central Florida LINDA C. McEWAN and DAVID H. HIRTH
Diets of Young Lapland Longspurs in Arctic and Subarctic Alaska T. R. SEASTEDT
COMMENTARY
THE BULLETIN BOARD
NEWS AND NOTES
TREASURER'S REPORT
RECENT PUBLICATIONS

**INFORMATION FOR CONTRIBUTORS.** Instructions on the preparation and submission of articles and other material for this journal are given in *Condor* 82: 114–116 (February 1980). Contributors are urged to follow these instructions and the niceties of the journal's style. Doing so will hasten publication, save money and effort, and gratify the editorial staff.

# THE CONDOR

## JOURNAL OF THE COOPER ORNITHOLOGICAL SOCIETY Volume 82, Number 2 Issued 15 August 1980 Editor: PETER STETTENHEIM

### Associate Editors:

GARY	D.	SCHNELL	CHARLES R. BLEM
CARL	E.	BOCK	MILLICENT S. FICKEN

### Assistant Editor:

#### Editorial Assistant: HELEN CURCIO SUZANNE NOTHNAGLE

## CONTENTS

Notes on the Taxonomy, Natural History, and Status of the Resident Birds of Palau H. DOUGLAS PRATT, JOHN ENGBRING, PHILLIP L. BRUNER and DELWYN G. BERRETT.	117
Factors Affecting Incubation Rhythms of Northern Shovelers ALAN D. AFTON	
Evolution of Promiscuity in the Brown-headed Cowbird PHILLIP F. ELLIOTT	
Survival of Herring Gull and Domestic Chicken Embryos after Simulated Flooding  LAWRENCE D. WARD and JOANNA BURGER	142
Factors Affecting Nesting Success in Riparian Bird Communities LOUIS B. BEST and DEAN F. STAUFFER	
Winter Breeding in Emperor Penguins: A Consequence of the Summer Heat? BERRY PINSHOW and W. R. WELCH	
Breeding Ecology of the Little Blue Heron on the West Coast of Florida JAMES A. RODGERS, JR	
Sleeping Behavior of Purple Martins CHARLES R. BROWN	170
Destruction of Nests by the Short-billed Marsh Wren JAROSLAV PICMAN and ANNA K. PICMAN	176
Feeding Ecology of Hummingbirds in the Highlands of the Chisos Mountains, Texas	
JOSEPH F. KUBAN and ROBERT L. NEILL	180

(Continued on inside back cover)