

He probably has never had a brush with Petrillo or Decca, but he has recorded as much as many of the top musical artists. It's just that Dr. A. N. Bragg prefers frog voices.

The Frog Man

By Bill Goodner, '52

Just as dusk stakes its claim on another day, a rather rotund little figure, attired in the appropriate dress of an Oklahoma angler including hip boots, Saturday clothes and an old friend of a hat, interrupts the thicket that crowds the edge of a small Sooner stream.

He stops—listens, and like a deer tasting the wind, gingerly pushes his way through the brush. His fishing gear is a mite unorthodox. He slowly wades out into the pond carrying a pole, a black rectangular box and trailing behind is a slender black cord that is swallowed up by the undergrowth. Once again he stops—listens. Nothing but chirping crickets, an occasional squeal from a night swallow intermingled

with the basso voiced—"KNEE-DEEP," "KNEE DEEP" and "JUG-O-RUM," "JUG-O-RUM" of the frogs. Apparently satisfied with what he hears, the man's round face displays an elfish jolliness as he sticks the pole into the mud, takes a microphone out of his pocket and sticks it on the pole. Obviously pleased with himself, he throws the switch and contentedly settles to the task of recording the frogs' voices.

The man who stealthy stalks ponds to record the frog crooners is Dr. A. N. Bragg, '37ph.d., associate professor of zoology at the University. He may be seen lugging his recording paraphernalia in the direction of a nearby body of water on most any spring or

summer evening. Though he calls his hobby by "biologizing," it could be more aptly named "Frogology." Bragg says he's not completely infatuated with frogs and toads but that he just happened to fall into that line.

Comfortably filling his swivel chair in his office in the Biology building, Bragg leaned back in thought, gazed ceilingward and reminiscingly remarked, "I guess that frogs and I first hit it off back in the spring of 1909 when I was a little kid running helter-skelter over a farm in Maine." The neighboring farm was operated by a superintendent of schools and young Bragg became intensely interested in a roomful of books the superintendent kept. On borrowing a stackful of books, Bragg discovered amidst the readers a natural history book, giving the usual treatment of ants, water beetles and tadpoles, frogs and toads.

Stimulated by his reading he found a new world in nature and became fascinated the next spring observing frog breeding. Subsequently he has been watching frogs and studying their habits every summer since then. While going through highschool, he graduated from the Main Central Institute in 1918, he learned that his observations of frogs and toads jibbed with the data in text books.

Majoring in biology, he received his B. S. degree from Bates College in 1924. In 1934 he received his M. A. from Boston University and in 1937 his Ph. D. from the University of Oklahoma. His teaching career began as an assistant professor of zoology at Marquette University. He worked as an assistant in biology in John Hopkins University, 1924, returning to Marquette in 1925, staying there as an assistant professor of zoology to 1933.

All through his undergraduate days Bragg would supply his classes with samples of frog life for it was as easy an assignment for him as asking a farm boy to obtain a sample of milk from a cow. Coming to Oklahoma he continued his studies of frog life. "My first spring in Oklahoma I hunted for frogs from February until April before I found any," chuckled Bragg. "I was work-



Listening to the recordings of frogs' voices in the comfort of his study is Dr. Arthur N. Bragg, associate professor of zoological sciences. Dr. Bragg has been tramping into marshes and bottom land over forty years collecting data on frogs.

ing on my degree in embryology, but after that I stepped up the research on my friend the frog for I realized that I had wrongly assumed frog habits were the same over the country."

Bragg worked his way through college, cooking professionally during the summer. Some friends of his family went into the summer resort hotel business and he started working summers for them as a bell-hop when he was 14. One day they needed some extra help in the kitchen so he was switched into the job. The chef took a liking to him and taught him how to cook. The chef wasn't the only one who liked him, for as Bragg stated in a good-humored off-hand manner, "Oh, incidentally, I married the chef's daughter." Bragg worked his way up the culinary ladder and soon found himself chef of one of the hotels in the chain. He worked as a cook and chef in New Hampshire and Maine each summer from 1914-25.

Discounting some of the pet peeves people have nursed about frogs and toads, Bragg said that all the nonsense about warts is just nonsense. "Warts on humans are just a pathological condition," he says emphatically, "and the warts on toads are skin glands and have no more relation to human warts than toenails."

One of Bragg's favorite sayings discounting old wives' tales and superstitions or mistaken public notions is, "In proportion as the public believes it, it isn't so." When workmen were stripping up a runway at Tinker air field in Oklahoma City a couple of years ago, they found a toad under the cement. A reporter got the idea that the toad had lived imprisoned under the cement for the past seven years and asked Dr. Bragg to examine the toad. Dr. Bragg did and explained to the disappointment of the reporter that it was a spadefoot toad and in all probability had slipped under a crack in the cement runway and dug his way over to where the workman found him. Laughing, Bragg said, "I don't know if I ever convinced that reporter or not, but anyway the two of us (Dr. Bragg and the toad) got our picture in the paper."

Bragg got the idea for recording frog's voices one drizzly night when he stood in a pond trying to clock the rate of speed of one frog's voice out of an entire chorus. His two hands couldn't manipulate the notebook, pencil, flashlight, stopwatch and thermometer (a frog's call varies in number depending upon the temperature and humidity) nor could his ears pick out the voice in all the commotion and hum-drum. He decided it just wasn't a scientific way to get things done. Applying a scientific mind to the problem, he hit on the solution of re-



J. Bruce Wiley, '35eng, '41m.eng, associate prof of electrical engineering at O.U., was recently named to the national committee on management of the American Institute of Electrical Engineers.

ording the voices and then studying them in the comfort of his office.

Bragg, who is hard of hearing, arrived at a lake south of Idabel one evening just as a thunderstorm let loose. Not wanting to get his equipment wet, but determined to record the frogs' voices after driving that distance, Bragg solved the problem with a sheer stroke of genius and soon was merrily recording the symphonic rumbling of the basso bulls from the warmth and security of his car.

The frogs, croaking to their hearts' content, were completely oblivious that Bragg was amplifying their raspy songs over his hearing aid and getting a perfect recording.

Dr. Bragg has written and published scores of articles on his work with the frog. Titles of some of his articles are:

"Psychology of Frogs and Toads," "New County Records of Frogs in Oklahoma," "Economic Value of Oklahoma Toads" and "A Biologist Looks at Religion."

Dr. Bragg suffered a heart attack last semester which has restricted his teaching and research activities. However, he is teaching two classes this semester and doing what research he can in his office. And come next spring when the frogs start tuning up, he'll be out in the marshland, on creek banks and wading ponds to record their voices for science.

Appointments

For the Armed Forces. Dean Earl Sneed, Jr., '34ba, '37Law, dean of the University law college was recently appointed to serve on a 6-man committee on legal service to the armed forces. Howard L.

Barkdull, president of the American Bar Association appointed Sneed to the military committee.

Dean Sneed has been chairman of a special Oklahoma committee on legal service to armed forces since June, 1950. One of the nation's youngest law deans, Sneed spent 35 months overseas in England, North Africa and Italy during World War II and was acting deputy commander of the 15th Air Force Service Command when he was discharged with the rank of colonel. He came to Oklahoma in 1945 as a visiting professor of law and has been law dean since June 1, 1950.

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For Public Relations. A former assignment reporter for the past five years for the *Tulsa Tribune*, Miss Elizabeth Stubler, was appointed October 1, as a senior assistant in the University public relations department.

Miss Stubler was a member of the public relations department of Douglas Aircraft Company plant at Tulsa. Also she was with the *Tribune's* advertising and women's department before joining its news staff.

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For Teachers Association. James G. Harlow, '31ba, '33ms, assistant professor of physics at the University was recently appointed chairman of a newly-established policies committee of the National Science Teachers Association.

The committee was set up to devise a new approach to science teaching in the country's public schools. The first meeting of the committee will be in New York City in November to begin outlining aims and purposes for the science teaching group.

Harlow formerly taught at Hobart, Seminole and Classen highschools and was director of science at Oklahoma City's North-east highschool before he joined the O.U. faculty in 1948.



DEAN EARL SNEED, JR.
... Legal Services