



Robert Kral's Development as a Botanist and his Role as Teacher and Mentor

Botany 2017 Colloquium: Kral-ing Through Time: The
Impact of Robert Kral on the Past, Present, and Future of
Botany in the Southeastern U.S

Fort Worth, Texas

June 26, 2017

Richard Carter
Herbarium (VSC)
Biology Department
Valdosta State University
Valdosta, GA 31698



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Robert Kral –
Major Life Events



Iowa

Clockwise from upper left: Howard County courthouse; Dunnings Springs; limestone bluffs, Iowa River; prairie



Trillium nivale –
snow trillium

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The Disappearing Moorland

ROBERT KRAL

For many miles radiating from Chicago new homes, new stores, even small towns are springing up like mushrooms. A city is spreading a growth of concrete and brick over a land which not so very long ago was wild and free. The sandpiper's faint, wind-borne song was once heard where busy streets now hum with traffic, and blackbirds swayed on wind-tossed cattail stalks where concrete sidewalks run past a maze of street lights and crowded homes.

The land around Chicago was a vast, lonesome expanse. Extending along the lake shore were miles of sandy marshlands, once a part of the old glacial lake, Lake Chicago. Tall fragrant meadow grass high as a wagon wheel billowed and undulated in the lake breezes, and on the sand risings and ridges wild strawberries bloomed and bore delicious fruit. Later in the season clumps of cacti seeming out of place in a northern world opened great, yellow, poppy-like flowers to the sun. Rushes, blue flags, low growing willows and feathery tamaracks braved the softer, marshier ground. This wilderness extended all along the shore and for miles inland, before the marshes gave way to higher ground and friendly, sheltering groves of oak. In the spring and again in the fall, birds by the thousands found temporary shelter among the swampy rush beds, and their cries rose in the morning mists into an expansive sky. Sometimes the howling of a migrating wolf pack could be heard across the barren moor. In all the growing seasons the meadows and swamps were clothed in ever-changing garbs of beauty as countless thousands of wild flowers, a never-ending carpet of brilliance, charged the air with fragrance.

A small settlement, our Chicago, expanded with the vigor of America. In time it spread its great growth along the lake and began to earn its reputation as a leading industrial city. Highways and railroads came, factories began their ugly existence, and wild life shrank from a city's poisonous touch. Swamps drained away into sewers, prairies were broken; the wild birds robbed of their homes came less and less frequently with the passing years. Wild flowers, which in uncountable numbers had populated the land, became scarcer and rarer, giving way to the sickle and plow, and to thoughtless people with little foresight. With the growing city's progress many of the strange and beautiful things about our land disappeared entirely, living now only in the memories and stories of a few who saw that dying glory and could not forget.

Some can remember when fringed gentians bloomed in profusion around Chicago. The flowers are now so rare as to be almost extinct. Why did they go? A prairie plant like the fringed gentian, for all its



Marshall Islands

US Dept of State Geographer
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Image Landsat / Copernicus
Data SIO, NOAA, U.S. Navy, NGA, GEBCO

Google Earth

Imagery Date: 12/13/2015 lat 11.245796° lon 167.005957° eye alt 6485.92



Roguren

Majuro Atoll

Majuro Island

Djarrit

Rairikku

Majuro

Image © 2017 CNES / Airbus
Data LDEO-Columbia, NSF, NOAA
© 2017 Google
Data SIO, NOAA, U.S. Navy, NGA, GEBCO

Google Earth

Imagery Date: 10/10/2016 lat 7.122824° lon 171.201726° elev -46 ft eye alt 30.39

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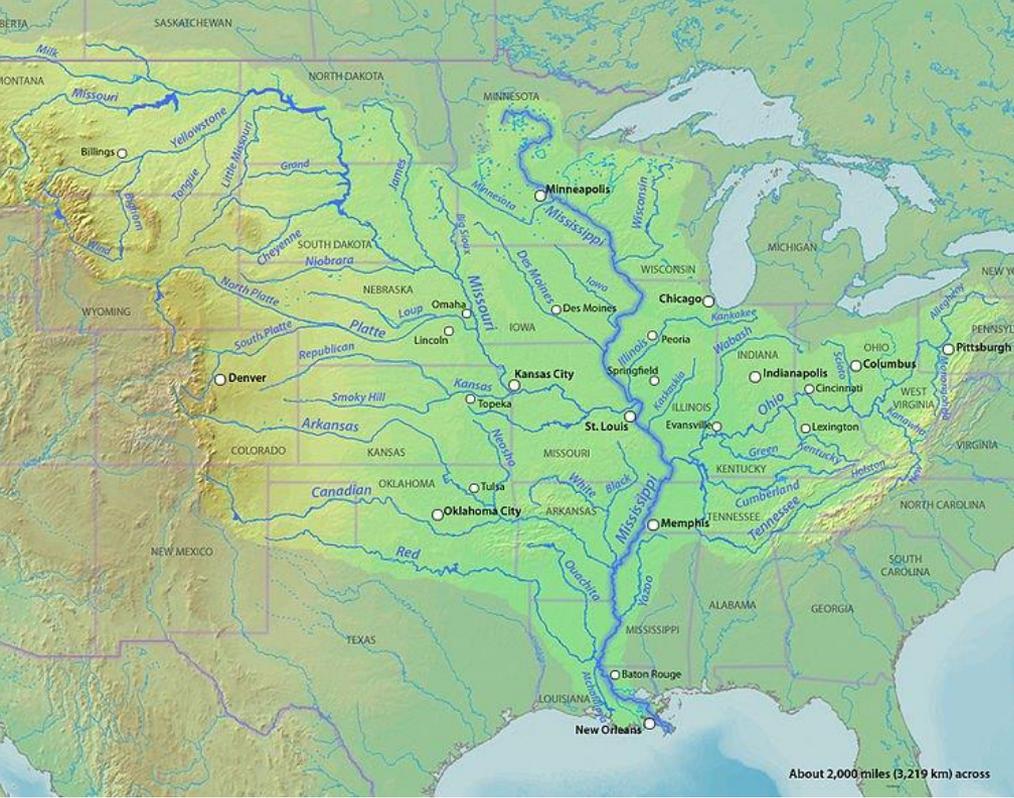
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**Robert Kral –
Major Life Events**



Mississippi River by
kayak

Mississippi River by kayak





Mississippi River by kayak





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Google Earth

1995

Imagery Date: 7/23/2013 lat 47.593852° lon -115.226661° elev 2479 ft eye alt 43243 ft

Eddy Peak, Thompson Falls District, Lolo National Forest, Montana



View from Eddy Peak,
6,957 ft

Thompson Falls District,
Lolo National Forest,
Sanders County, Montana





U.S. Army, Korea (1952-1954)

CLASS OF SERVICE

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WESTERN UNION

W. P. MARSHALL, PRESIDENT

1201

SYMBOLS

DL=Day Letter
 NL=Night Letter
 LT=Int'l Letter Telegram
 VLT=Int'l Victory Ltr.

The filing time shown in the date line on telegrams and day letters is STANDARD TIME at point of origin. Time of receipt is STANDARD TIME at point of destination.

SA394 PA779

1953 JUN 26 PM 8 08

P. WA967 RX GOVT PD=FAX WASHINGTON DC 26 800PME=

DR IONE J KRAL=

1130 PAULINA ST OAK PARK ILL=

THE SECRETARY OF THE ARMY HAS ASKED ME TO EXPRESS HIS DEEP REGRET THAT YOUR SON 2D LT KRAL, ROBERT HAS BEEN MISSING IN ACTION IN KOREA SINCE 14 JUN 53 CONFIRMING LETTER FOLLOWS=
 WM E BERGIN MAJOR GENERAL USA THE ADJUTANT GENERAL OF THE ARMY=

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

Report Kral, Missing in Korea, Was With Group of Observers

Slightly more specific news was received this week by the mother of Second Lt. Robert Kral, 27, of 1130 Paulina, reported missing in action in Korea June 14. His mother, Dr. Ione J. Kral, heard from a friend in Tokyo who had ascertained that Lieutenant Kral was "one of a group of advance observers lost on an unidentified mountain top in Korea." The information, obtained in Japan Tuesday, of last week from the Red Cross locator squadron, was to the effect that none of the group had been seen or heard from since June 14.



(Helen Cummings)

Lt. Robert Kral

The word was first news received since a telegram stating the fact he was missing,— other than the return of letters she had posted to him.

Bob was graduated from Oak Park-River Forest high school in June, 1944, and joined the Marines immediately, serving in Hawaii and the South Pacific through World War II.

* * *

AT THE END of that war, he continued his studies, majoring in forestry first at the University of Illinois, and then at Iowa State college at Ames, for a year at each, and then two years to graduation in forestry at North Carolina. He had entered the army

reserves, meanwhile, and had filled forestry positions in mountain areas in the west the summers between school years.

He had accepted a position with the United States geological department before graduation, but was called up that same month, in February, 1952. He was with an infantry unit which left San Francisco for Korea last April. In his last letter, received by his mother before the official telegram, Bob spoke of his position as observer on a mountain,

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THURSDAY, AUGUST 27, 1953

OAK PARK, ILL.

Lt. Robert Kral Released by Reds

When a call came through at 3:45 a.m. Monday from Tokyo, Japan, Dr. Ione J. Kral, 1130 Paulina, was soon speaking with her son, Second Lt. Robert Kral, 27, who was among American prisoners released in Korea Friday.

Before receiving the "wonderful news" of his release, Kral's mother had had no official report since the lieutenant was reported missing in action in Korea June 14. He had been

serving with an infantry unit in Korea since April.

From the telephone conversation and from a telegram from her son, Mrs. Kral learned that he had incurred a leg wound and that he expects to be sent back to this country by plane from Tokyo almost immediately, probably arriving in the States toward the end of this week. He then will go to a army hospital (possibly at Battle Creek, Mich.) for further treatment of his wound.



Lt. Robert Kral

STARTS TUESDAY

Assistant State's Attorney Is Detailed to Office Here

Oak Park, for the first time in its history, after Tuesday will have an assistant state's attorney regularly detailed to the village. He will office in the village hall and function in close cooperation with the police department, health department and other agencies in law enforcement matters.

State's Attorney Gutknecht this week disclosed he has arranged for assignment of Albert Hoffman, a regular member of his staff, to the Oak Park district.

Gutknecht pointed out the move should also be a convenience to the public generally, since citizens desiring to contact the state's attorney's office will be saved a trip to Chicago in many instances. The assistant will be available to all

offenses under the state law and promote more effective law enforcement, he said.

Gutknecht and Richard Austin, his first assistant, will be in Oak Park Tuesday for the inauguration of the new system.

West Towns Plan Wins Court OK

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SAO36 MA115

M. WAO36 RX GOV.T PD=WUX WASHINGTON DC 22 509AME=

DR IONE J KRAL=

1130 PAULINA ST OAKPARK ILL=

THE SECRETARY OF THE ARMY HAS ASKED ME TO INFORM YOU THAT YOUR SON 2D LT KRAL, ROBERT WAS RETURNED TO MILITARY CONTROL IN KOREA HIS CONDITION IS SERIOUS PD HE IS RECEIVING BEST MEDICAL CARE AND WILL BE RETURNED TO UNITED STATES AS SOON AS HIS CONDITION PERMITS PERIOD ARRANGEMENTS HAVE BEEN MADE FOR HOSPITAL COMMANDER TO FORWARD TO YOU WITHOUT DELAY A LETTER DESCRIBING YOUR SONS CONDITION IF HE IS INABLE TO WRITE= WM E BERGIN MAJOR GENERAL USA THE ADJUTANT GENERAL OF THE ARMY=

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Robert Kral –
Major Life Events

Dr. Robert K.
Godfrey (left)
with Angus
Gholson



Major botanical influences

- Dr. Bob Godfrey – Florida State University
- Dr. Lloyd Shinnars – Southern Methodist University
- Dr. William Fox – North Carolina State University
- Dr. Delzie Demaree

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Robert Kral –
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Major courses taught

- Plant Taxonomy
- Dendrology
- Local Flora
- General Botany

Bob's teaching

- Emphasis on diagnosis, analysis, and identification
 - Phytography descriptive terminology
 - Employing evidence from the diagnosis to identify unknown plants using analytical dichotomous keys
 - Characteristics of major families
- Whenever possible, students worked outdoors with the living plants.
- Sets of dried specimens were used early spring semester when cold prevented taking students outdoors, and to show examples of families otherwise not available



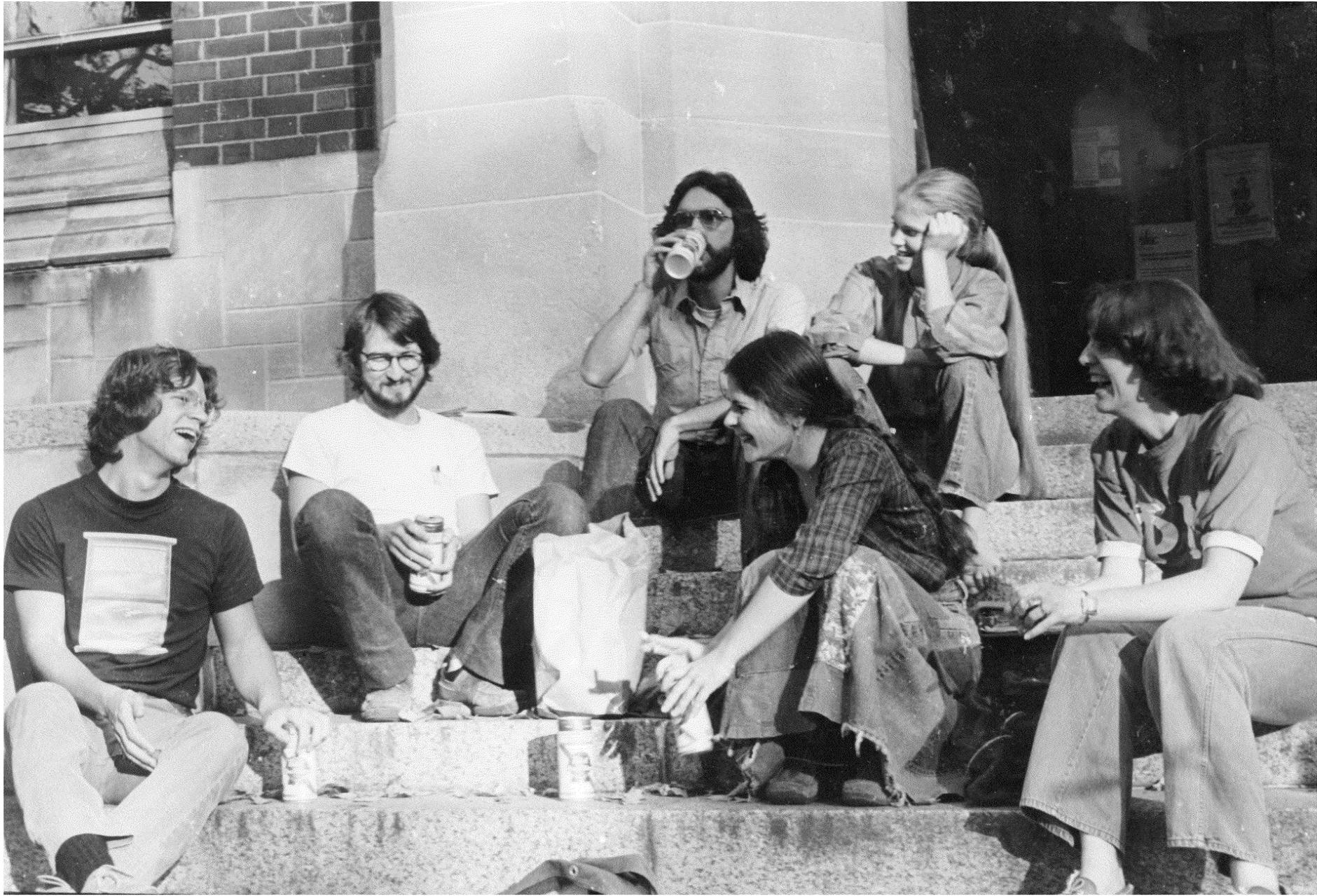
VSU Local Flora students with *Schwalbea americana*
Doerun Pitcher Plant Bog Natural Area, Colquitt County, Georgia



VSU Plant Taxonomy class
Broxton Rocks, Coffee County, Georgia

Dendrology

- Friday afternoon, Saturday morning schedule
- Most labs were field oriented.
 - Local field trips, vic. Nashville
 - Overnight trips
 - Fall Creek Falls, Cumberland Plateau
 - Nashville to the Gulf Coast
 - First night – Oak Mountain, overnight trip,
 - Second night – Open Pond, Conecuh Nat. Forest
 - Coastal scrub, vic. Destin, Florida



Vanderbilt Dendrology students
steps of Garland Hall, circa 1978

Graduate mentor

- Gene Gonsoulin – *Styrax* (Styracaceae)
- Jim Parks – *Melanthera* (Asteraceae)
- Donna Eggers Ware – *Valerianella* (Valerianaceae)
- Leo Collins – *Scutellaria* (Lamiaceae)
- Janice Alcorn – *Flora of Sumner County, Tennessee*
- Ron Jones – *Aster* (Asteraceae)
- Richard Carter – *Cyperus* (Cyperaceae)
- Bert Pittman – *Scutellaria* (Lamiaceae)
- Lisa Kelly – *Flora of Williamson County, Tennessee*
- Gerry Moore – *Rhynchospora* (Cyperaceae)
- Jay Reveill – *Desmodium* (Fabaceae)

M.S. thesis

Ph.D. dissertation

Bob's advice

Teaching

- Let the plants do the teaching.
- Take the students in the field whenever possible.
- Test frequently.

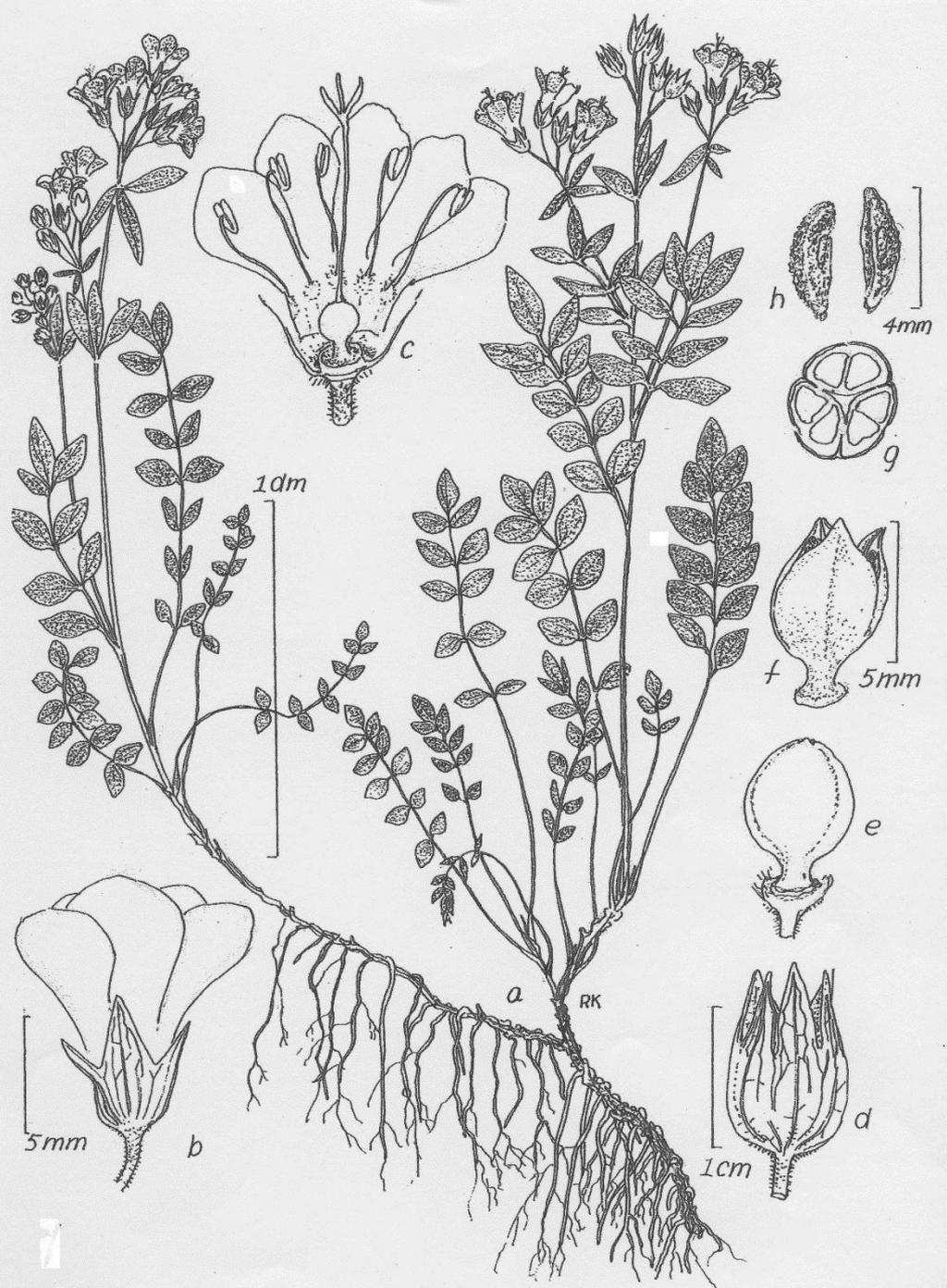
Research

- Go to the field for your answers: The plants are best studied in the field.
- Prepare vouchers to document your work.
- Select a group that holds your interest.
- Draw the plants.

Bob encouraged his graduate students to draw the subjects of their investigations.

He taught by example.

I sat with the master, observed him preparing illustrations, discussed techniques and plant structure, and asked questions.



Misc. Field Trips

- USFWS work on rare, threatened, or endangered forests plants
- I was very fortunate to accompany Dr. Kral on some of these trips.
 - To eastern Virginia, with stops in the Appalachian Mountains, and North Carolina sandhills
 - To central Florida
 - To eastern Texas, Arkansas, and Missouri



Lindera melissifolia

Bob pressing plants

Early County, Georgia
circa 2007





Bob working through recent collections in his herbarium

Cairo, Georgia
circa 2014



Bob, with Albert Sanders, examining *Juncus biflorus* holotype in the Stephen Elliott Herbarium at the Charleston Museum (CHARL), Charleston, South Carolina, circa 2005

Bob with *Hartwrightia floridana*
Charlton County, Georgia
circa 2004





Bob admiring *Rhexia salicifolia* in exsiccated karst pond

Early County, Georgia
circa 2007

Summary

- As a teacher, Bob was incomparably generous, particularly with his most valuable resource – his time.
- He was patient and taught exceedingly well and – whenever possible – in the field with the living plants.
- His enthusiasm and work ethic were legendary. He truly taught by example.
- We were indeed fortunate to have been Dr. Kral's students, and his lessons have endured.
- *Thank you, Bob!*

