FLORIDA TIMES - UNION, April 12,1929

Herman Gunter to Address Woman's Club

Mrs. B. L. Arms, director of the department of travel and science of the Woman's club, announces that the program planned for the department meeting at 2:30 o 'clock Wednesday afternoon at the club, will have as speaker, Mr. Herman Gunter of Tallahassee, state geologist, who will give a lantern slide address on The Significant Geology of Florida.

All members of the Garden club are cordially invited to be present on that occasion as guests of the travel and science department of the club.

The subject is one which interests all as it treats of the formation of the Florida peninsula, explains some of the unusual topography of the state, gives a cause for such formations as the solution basins. Payne's prairie, the sink holes, the lake regions, the famous arch bridge, the Everglades, the keys, etc.

Mr. Gunter is a gifted speaker and comes to the club armed with vital and first-hand information.

All members of the club are invited to be present.

FLORIDA TIMES - UNION, April 14,1929.

Woman's Club to Hear Herman Gunter

Mrs. Herman Gunter, state geologist, will talk before the travel and science class of the Woman's club at 2:30 o'clock Wednesday afternoon in the lounge of the club. All members of the club and of the Garden club are invited and are given special invitations to be guests on this occasion.

Mr. Gunter will give a popular lecture on The Significant Geology of Florida. Mrs. B. L. Arms, director of the department of travel and science, says:

"Geology is all too generally thought of as a science of use and interest only to a chosen few, who may have had special training in the subject. But is this actually the case? Geology in fact deals with everyday problems and has done much for the betterment of living conditions and in the development of the industrial life of the world.

"Therefore while geology in general may not interest the citizens, the geology of their own state, coupled with suggestions as to the economic importance of the subject, should be of interest. In this talk on the geology of Florida by Mr. Gunter, state geologist, there will be brought out the story of the development of Florida, tracing the geological history from the oldest exposed formation, namely the Ocala limestone, through the various periods to recent time, the latter being represented by the sand dunes and other coastal features.

"Where does the world's greatest production of phosphate come from? What state is a leading producer of fuller's earth and what is fuller's earth? What is the origin of the enormous volumes of water giving rise to some of the largest limestone springs in the United States What formation yields all the water that Jacksonville is supplied with?

"These are some of the questions that a study of geology helps to solve and will be brought out in the discussion of the geology of the state. A number of lantern slides have also been prepared which will illustrate the geological features, the mineral industries, as well as some of the natural wonders of Florida."

FLORIDA TIMES-UNION

April 18,1929

Herman Gunter Speaks at Woman's Club

Mr. Herrman Gunter of Tallahassee, state geologist, spoke at the Woman's club yesterday afternoon on The Significant Geology of Florida, being brought to this city by the travel, science and world events department, Mrs. B. L. Arms, director. Mr. Gunter is the first man to address a group of women in the lounge, this arrangement being necessary because of the flower show plans being carried out in the auditorium.

Mrs. Arms introduced the speaker, saying that he would be able to answer any questions the women might desire to ask on the subject chosen for the afternoon. Mr. Gunter said in part:

"Though the geological survey has been functioning for twenty years, Florida has no geology history. Changes are constantly taking place: there is limestone foundation underlying the state containing the fossil remains of sea and land creatures.

"The coral formation is a small part of the mystery that some try to make of Florida's geology. The geology of Florida is not complex, the foundations are of sedimentary origin and have not been subjected to a great deal of change through distortion of earth movements. There are no volcanic or igneous rocks in the state."

The speaker gave a technical description of the rock formations of the state. Mr. Gerald Pouton accompanied Mr. Gunter and showed sixty slides beginning with geologic wine table of Florida and including various views of the Ocala limestone pits; of Silver Springs, also Juliet springs, Thelma springs and a collection of interesting state scenes and landmarks along the coast, and of canals draining the Everglades.

Mr. Gunter answered questions at the close of the program in a gracious manner. A social hour was enjoyed over tea cups in the lounge.

Chairmen of groups in Mrs. Adams department are arrangements Mrs. LeRoy D. Jones; travel class, Mrs. E. H. Emery; science and world events, Mrs. Philip W. Trout; international relations, Mrs. Emmet Safay.

THE GEOLOGY OF FLORIDA.

Foreword.

It is a distinct honor and privilege to be called upon by this organization to speak upon the general subject of the geology of Florida. It is an opportunity that I particularly welcome for we are always happy in telling, through other than the printed page, the geological history of our State and something of the work of the Florida Geological Survey. With this thought let me say, by way of parenthesis, that the Survey has been functioning for more than twenty years. At the beginning we found it was a case of acquainting many with just what was meant by "geology" or"geological". The word "survey" was understood but frequently misconstrued when associated with "geological". By explaining that a Geological Survey had to do with the rocks, minerals, soils, water supplies and other related natural resources, the work has come to be better and better understood so that now our citizens generally know of its functions and the work it is accomplishing. It was indeed not surprising that at the outset it was necessary to make more or less frequent explanation for this was to

be expected of a new department in an entirely new field for Florida. But occasionally even today we do meet those who express surprise and wonder that there is such an organization as a Geological Survey, particularly in a state like Florida that has no geology! Indeed some may actually think, as did the person giving expression to the statement just made, that Florida is a state without geological history, but those of us who have given this matter consideration are convinced otherwise and therefore I am the more pleased at being here so that I may give you as interestingly as I can an outline of the story of Florida's geological making.

INTRODUCTION.

In the remote past man's knowledge of the natural sciences was very limited. The earth and the mystery of how it came to be probably then give him but little, if any, concern. It seems that he was content to think of the earth as a creation unchangeable, if indeed he thought of it at all. Thus we find expressions such as "the everlasting hills", implying the permanence of the earth, something which had always been and always would be. Gradually, however, through the ages that have come and gone, man has come to learn that changes are forever and continuously taking place in the configuration of the earth. His impelling curiosity and incentive to grope after facts relative to natural phenomena has made him satisfied only with that which could be proven.

Copernicus, who taught the world the order of the system of the sun and planets, namely, that the earth revolves around the sun, died less than four hundred years ago and Sir Isaac Newton's law of gravitation, one of the most far reaching laws of natural science, was stated less than three hundred years ago. Such outstanding leaders caused or stimulated others to inquire into the reasons for other puzzling natural phenomena. The science of geology dates to little more than one hundred years ago. Some there are we know who accuse man, or shall I say the scientist, of departing from a faith in Divine proceedings because of his search for light and truth as found in natural law, but to me it is only God's highest creation striving to explain His plan through natural law, thus strengthening and confirming his belief in a supreme Being who directs the detinies of the world.

No wonder that superstition so large a part in framing the thoughts of those who have preceded us. It is now more amusing than startling to us to read the explanations given attempting to account for the occurrence of some of our natural deposits. Even here in Florida, which is a state having a limestone foundation, time and again have we been asked the question when sea shells were found embedded in deposits now far removed from the present ocean, if these were not deposited there during the flood, referring to the deluge spoken of in the Bible. We of course know they were deposited many thousands of years previous to historic time, and that they were left there during invasions of the sea which happened time and again during the geologic past. The fossils themselves are mute evidence of this fact. The whole state of Florida is included within the province designated the Coastal Plain and the deposits making up the several formations are all of sedimentary origin and contain the fossil remains of both sea and land animals.

GEOLOGY.

Geology, some make of it almost a mystery word, others are doubtful of its meaning and many know somewhat of its purpose but question what good purpose it might serve. Huxley, it seems to me, has given a good definition as follows: "Geology is the history of the earth in precisely the same sense as Biology is the history of human beings". The word comes from the Greek and means earth, thus the original meaning was a study of the earth. As now understood, however, it has a broader significance and a more inclusive meaning. Another definition: "Geology is a study of the earth and its inhabitants as recorded in the rocks of the earth's structure and as interpreted by forces still in operation". The fossil remains tell the story of the former inhabitants. The structure, character, nature and composition of the rocks reveal the condition under which they were formed. Thus we have igneous rocks which tell of volcanic activity; the metamorphic rocks or those which have been entirely changed through the combined action of water, heat and pressure exerted during tremendous earth movements and resulting in the folding, distortion and profound changes in the rock; and the sedimentary rocks or

those whose materials have been sorted and deposited from suspension in water, such as limestones, shales, sandstones, clays, sands. To this latter latter classification all of the exposed rocks of Florida belong.

ROCKS OF FLORIDA.

With this all too extremely brief and general presentation of what geology means, let us turn to the geology of our own State. In a sense the geology of Florida is not complex. As just stated all the formations are of sedimentary origin and have not been subjected to a great deal of change through distortion by earth movements. There are no surface exposures of volcanic or igneous rocks in the State, but such rocks lie at considerable depths. The early writings on the geology of Florida express the opinion that the State is mostly of coral formation. This conception gained wide circulation and for many years was the accepte explanation of the origin of the peninsula. Indeed it is true that Florida is of limestone origin, that the deposits on Key Largo, southern Florida, are truly coralline, and that corals are present in some of our other formations, but on the whole corals have played only a very small part in the upbuilding of the State, this fact having been established more than forty years ago.

To the geologist, and to those who study the subject, a geologic time table is as essential as is a railroad time table to the engineer, the conductor and the traveling public. In other words it is the geologist's time piece. Therefore in presenting an outline of the geology of Florida let us first of all glance at a geologic time table in order that we may orient ourselves with respect to the position Florida holds in such a time scale. As will immediately be seen the formations exposed in Florida all fall within the uppermost or youngest major time division termed the Cenozoic, and meaning recent life. Putting it another way then Florida, geologically speaking, is young. However, in thinking of the age in terms of years the figures assume a very respectful number. Each one of these great major eras is divided into lesser periods and the periods into formations and so on. It is not my purpose to run the risk of burdening you by making further reference to these periods or formations by name, except where the latter have been given a local name which will be familiar to you. But for convenience and the sake of orderly development the formations will be taken up in order, beginning with the oldest.

THE OCALA LIMESTONE. The oldest exposed formation in Florida in the Ocala limestone named from the city of Ocala on account of its typical occurrence there and surrounding country. The generalized geologic map will give you an idea of general distribution of this limestone in Florida. It is the controlling formation over a rather large territory extending from southern Suwannee County to the northern part of Pasco County. Areas of lesser extent are also present in west Florida. The characteristics of this limestone are that it is prevailingly soft, granular and very light colored, almost white,. Locally, however, it has been changed and is more or less crystallized or hardened. It is abundantly fossiliferous, containing large and small shells as well as myriads of microscopic fossils.

From an economic point of view the Ocala is perhaps the most important formation in Florida. Water is at once one of the most important necessities of life, it is an absolute requisite of civilization. Where adequate supplies of good water can be obtained that State, City or Community has indeed a most valuable asset - one not to be overestimated. The Ocala limestone underlies, so far as well records indicate, practically the entire State. It is this limestone which yields the almost unbelievably large volumes of artesian water. The deep wells furnishing the city supply here in Jacksonville penetrate this formation at a depth of a little more than 500 feet and it is from that your splendid artesian flows come. The largest and most beautiful limestone springs in the United States are found in Florida, the largest of which emerge from this formation. In phosphate mining and in other industrial operations vast quantities of water are needed. To supply this need it is only necessary to drill wells and when the Ocala is reached ample supplies are obtained. It may be of interest to mention here that Florida has not only the largest limestone springs in the United States but also has probably the largest well. One of the large phosphate mining companies in Polk County has a well that has been tested to yield from 7,500 to 8,300 gallons of water per minute. Not only does the Ocala supply our State most generously with a bountiful and potable water but the limestone itself is extensively used as a road building material.

Many hundreds of miles of improved highways throughout Florida have been built with this limestone as a base. Further than this, the Ocala is used in an agricultural way, that is for direct application to those soils needing lime and many of the soils of Florida are benefited by such. Also, the limestone is burned for the making of lime for use in plaster, mortar and building trades generally. Therefore it is not too much to say that the Ocala limestone is indeed a formation of utmost importance to Florida.

Following the Ocala limestone in age come three formations chief of which in Florida is the Marianna. This is quite similar in general physical characteristics to the Ocala. It is soft, very fine grained, light colored. It is on the whole not so fossiliferous. This, too, like the Ocala, is used in road construction and also in the manufacture of lime. It is not widely distributed in Florida, occurring only in the western part of the State, near Marianna, Jackson County.

Locally it is used as a building stone, a number of structures in Marianna and surrounding territory having been built of it. From its use in building chimneys it is known as "chimney rock".

Many hundreds of miles of improved highways throughout Florida have been built with this limestone as a base. How well it serves this purpose the roads themselves speak. In agriculture, too, it finds a ready market for direct application to soils needing lime. Also in the building trades for many tons of the limestone are burned for making lime which is used in plaster, mortar, etc. Is the Ocala then not a formation which has given and is giving much toward to development of Florida?

As previously brought out the Ocala is very pure and very soft. Waters carrying organic acids in solution dissolve the limestone very readily. This is shown by the character of the artesian waters throughout the State and are called "hard". Also we see evidence of this solvent action on every hand throughout the limestone regions of the State. Caves and sink-holes are of common occurrence and the many beautiful lakes of Florida owe their origin, at least in large part, to the solubility of the underlying formations.

The Marianna Limestone. Following the Ocala limestone in age come three formations chief of which in Florida is the Marianna, named, as might be inferred, from the city of Marianna in Jackson County. This limestone is quite similar in general physical characteristics to the Ocala. It is soft, ordinarily very fine grained and light colored. Although containing fossils they are not so generously abundant as in the Ocala.

The Marianna, too, like the Ocala, is used in road construction and to a lesser extent in the manufacture of lime. It has a rather restricted distribution, occurring in a narrow belt near Marianna. Locally it is used as a building stone, a number of structures in Marianna and surrounding territory having been built of it. From its rather extensive local use in the construction of chimneys it has come to be known as "chimney rock".

The Tampa, Hawthorn, Chipola and Other Formations. We now come to an important group of formations which compose our next youngest time division. Within this subdivision we have placed six formations and these have a rather wide distribution. For this discussion, however, we will confine ourselves to the Tampa, Hawthorn and the Chipola. The Tampa is a limestone that for Florida rock is hard. As a rule it is light colored but in this respect it varies, some phases being variegated and brownish. In the vicinity of Brooksville are several quarries which have produced large tonnages of this rock mainly as an aggregate for concrete and for road surface material. Another new use for Florida is for the manufacture of Portland cement. Perhaps it may be news to you that Florida now has a very modern cement plant located at Tampa and getting its raw materials - the limestone and clay in the vicinity of Brooksville.

The Hawthorn is worthy of special mention on account of the large deposits of fuller's earth being placed within this division. Fuller's earth is a variety of clay used in clarifying and the refining of crude oils and fats. The Hawthorn is typically exposed near the town Hawthorn, Alachua County, at which locality it is really a phosphatic marl or limestone. Therefore it is seen that it is a variable formation carrying sands, sandy-clays, fuller's earth and phosphatic marls. The formation is in fact the basal rock from which a large portion of our workable pebble phosphates were derived. Another fact worthy of particular mention is that

in the vicinity of Bradenton, Manatee County, this phosphatic marl is being quarried as a stone for interior decoration or finish. As produced at this quarry the stone has a very attractive and pleasing effect and it will no doubt find a large use not only in Florida but elsewhere.

The Chipola is principally a phosphatic and a shell marl which in age is thought to be comparable to the Hawthorn. This phase is typically exposed in western Florida.

The Alachua, Bone Valley gravel and Citronelle Formations. Stepping up in the geologic time scale we have now come to a division that for Florida, from an economic standpoint, is by far the most important. It is within this group that the phosphates of Florida occur, the Alachua bearing the hard rock phosphates, the Bone Valley gravel the land pebble phosphates. Florida has for many years led the World in the production of phosphate and this one mineral resource has meant many million of dollars to the State. These deposits are also rich in fossils and the mining operations have contributed much to our knowledge of the animals that once roamed in abundance in our State. The Citronelle carries the kaolin deposits, that wonderfully high grade, white-burning clay which is used in the manufacture of high grade china and procelains. It is also a formation carrying more or less coarse sands and gravel as well as sandstone. Some of the sand and gravel is used as material for concrete to which use it is admirably adapted. The Citronelle also gives rise to some of the most striking topography in the State, with beautiful lakes, which are so attractive.

The Pleistocene and Recent. We have now passed in brief review the formations of the State up to the last period before recent time, namely the Pleistocene. To this belongs the coquina which is such a beautiful and attractive stone occurring along our east coast and used so much in building. It is also of historic interest as all of us know on account of its use in the construction of Fort Marion and other historic structures. To the Pleistocene we have also assigned a number of other formations, chief among them being the Miami oollitic limestone, some fresh water marls in southern Florida and the Melbourne Beds. The Miami limestone is used extensively in southern Florida both as a building material for the many beautiful homes there as well as in road work. It is termed locally coral rock, thus we

Coral Gables and other names which do not aptly apply. The Melbourne Beds are important because of their fossil content. Many land animals have been recovered from these deposits including the remains of the Mammoth, Mastodon, Tapir, Saber-tooth tiger, and numbers of others.

To Recent is assigned some of our dunes, Indian Mounds, reefs, bars and other coastal features.

Thus we have outlined Florida's geological history in a hurried manner within a few brief minutes. When we pause for a moment to think how long it has taken to bring all the events about that we have been considering it is almost staggering. Man's advent into the scheme of creation was the very latest event, in this he is a mere infant. May we not press on confident in the hope that as our knowledge increases so will The Creator bestow unpn increased wisdom to grasp those things of nature that He placed here for our enjoyment.

FROM
(Florida Clipping Service, Tampa)
St. Augustine Record
FLORIDA
DATE JUN 23 1938

Forms Of Sea Life Factors In Making Oil

Found With Sedimentary Rocks in Every Continent of World

Fish, coral and other forms of sea life which for countless millions of years have been buried beneath the earth's crust, are basic factors from which petroleum used throughout the world today was formed. Oil, according to the American Petroleum Institute, is found with sedimentary rocks which are mainly shale, limestone and sandstone. Shale, scientists have found, is merely clay or mud more or less compacted. Oil shale under the microscope reveals the elements of algae of insects, fishes and many other forms of life. Limestone, scientists have found, is made up mainly of remains of lime-secreting organic life which may be microscopic in size or larger forms such as corals and shell fish.

Sedimentary rocks take their name from sediments. The sediments from which they were derived were laid down on the earth millions of years ago by wind, water, or ice. Throughout the ages rivers flowed into ancient seas carrying great volumes of mud, sand, vegetable and animal matter and deposited the silt in great plains along their courses and upon the ocean bottom. Slowly squeezed by the weight of overlying silt this mud and sand of geologic yesterday became the shale, limestone and sandstone—the sedimentary rocks of geologic today.

Sedimentary rocks are found in every continent and buried widely in the earth's crust. The ancient seas have disappeared, but far inland these rocks containing the remains of tiny marine plants and fishes, are now providing evidence of their previous existence.

"Science tracing the origin of petroleum," representatives of the American Petroleum Institute said in 1930, "regards extremely important the evidence of plant and animal life found in shales and limestone. It has taken sedimentary rocks which locally contained large quantities of organic material and by heating produced petroleum.

"Weighing the evidence, science assumes that in some manner plant and organisms similar to those found in shales and limestone were the origins of oil.

"It believes that these minute organisms buried in the seas by new mud deposits concealed from air and protected from the ordinary processes of decay by the brine of the ocean itself were subjected to slow decomposition and yielded among other products the petroleum of commerce."

All sedimentary rocks, however, do not contain oil and why some beds contain petroleum and others do not is one of the greatest unsolved problems of the petroleum industry.

St. Augustine's well-stocked Public Library, a coquina and wooden structure, was erected prior to 1785. It is the birthplace of Edmund Kirby-Smith, last of the Confederate generals to surrender and contains the valuable Ammidown Genealogical Collection and Caldecott's Collection of original drawings.

Geology Plays Important Part In Development

Wonderful Advancement Is Pictured in Able Address Before College of Commerce and Journalism By Herman Gunter.

"It was with problems connected with mining that geological advice was first sought and it is with this industry that geology has always held a large and important place. It was perhaps in coal mining that geology first made itself indispensible," stated Herman Gunter, state geologist, of Tallahassee in his address on "The Business Man's Relationship to Earth Sciences," delivered yesterday morning before the students of the College of Commerce and Journalism at the University.

This was the sixth of a series of lectures arranged by Dean Walter J. Matherly on "The External Relationships of Business Management."

Mr. Gunter said: "There is no economic subject bearing a closer relationship to geology than the exploatory work in oil and gas fields. In the matter of oil alone the profession of geology has won a place in the industrial and business worlds that could not have been foreseen even a few years ago. When we stop to consider that a single oil corporation has in its employ more geologists than are in the service of the United States geological survey we get some conception of the place geology holds in the minds of those connected with oil development.

"In the investigation of structural materials such as building stones, clay, sands, gravels, slates, cement, gypsum and many others, geology has contributed data assuring scientific accuracy of results, and in this way, has created a close relationship with construction engineers.

"In other lines, such as the selection of routes for highways, drainage as affected by the underlying formations, suitability of materials for road construction, are problems for the geologist. What has been said of highways can with even greater force be said for other engingering projects, such as railways, canals, aqueducts, tunnels, harbors and dam sites. In the construction of the Panama Canal, the aqueduct for the City of New York, geologists were employed.

The services rendered by the geologist in the world war is well known. Such problems as the location of camp sites, tronches, water supply and sanitation, had a direct bearing on the structural geology of the region and therefore persons familiar with such conditions were called upon to act as military geologists.

"From a geological point of view, Florida is very young. All of our exposed formations fall within the last major geological time division. The oldest formation which we see at the surface is the Ocala limestone which is mined on such a vast scale in and around Ocala. The sink holes on this campus are here because of the solubility of this Ocala limestone. It is also well exposed at Alachua sink and at other nearby localities. The next oldest formation, near Marianna, is fossiliferous but not to the extent that the Ocala is. The Marianna is soft, light colored and easily quarried. From its first local use, namely in the building of chimneys, it became known as "chimney rock."

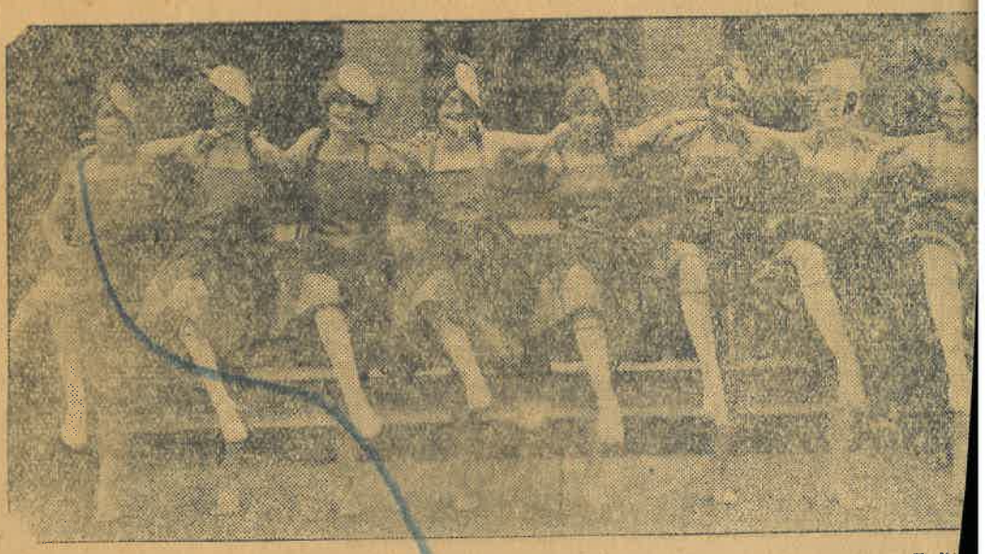
The speaker stated that in naming the geological formations local names of towns have largely been used. He said that other formations in this state were the Glendon, Tampa, Hawthorn, Chipley, Oak Grove, Snoal River and Choctawhatchee. He added that the Hawthorn was a cream colored yellowish phosphatic marl. He declared that the Alachua, which carries the hard rock phosphate, was economically the most important in Florida.

Mr. Gunter spoke briefly on each of the various formations in this state and told of the help that the geologists had given in the classification and use of these.

ORLANDO YOUNG MAN DIES FROM INJURIES

ORLANDO, Fla., Feb. [illegible] (AP)

Artistic Ballet Number in Follies



The "Balloon Ballet" will prove one of the most delightful specialty numbers in the "Folli when this beautiful musical show is presented at the new high school auditorium March the benefit of the American Legion building fund.

Many Stars In 'Follies' Cast For Next Week

Indications Point to One of Most Gorgeous Attractions Ever Presented in Gainesville March 8 and 9.

The next big event on the calendar for Gainesville will be the elaborate "Follies of 1928," which is to be staged at the spacious new high school auditorium on the evenings of March 8-9. This unusual attraction is being presented under the auspices of the American Legion. Gainesville should have a home for the Legion and the members are taking this means of raising funds to start the clubhouse. There is no cause that should appeal to the community at large as this does and capacity houses should greet the two hundred singers and dancers who are in strenuous training for this beautiful production.

If you want to find out just how a professional musical revue is prepared for the stage, just go around to the parish house any afternoon or evening and watch Gene Trader at one of his rehearsals. You will come away an enthusiastic booster for the "Follies" and will probably be in line early next Tuesday when the reserved seat tickets are placed on sale at Glass' No. 1. One thing is certain—no musical show on Broadway has ever had prettier girls than those who are taking part in the "Follies." And besides beauty they possess a freshness and youthful charm that is not to be found in a professional show.

A new star has been enlisted for the "Follies" in the person of Ralph David. Ralph is a great favorite among the University boys, for he "konws his stuff" when it comes to dancing. He will present a comedy buck and wing number called the "P. O. T. C. Dance" and those who have seen it claim that it is a "wow."

Gene Trader has also announc-

Last Call For Wedding A

Noon today will for applicants wish ried in an airplan

The first couple with W. P. Arnold ager of the Gain have the honor.

The newspaper minister and rin will be taken alo noon in a Gates F plane.

The Gates airpl here from tomorro inclusive, carrying $1 and giving free the city and at J under the auspic paper.

Free tickets—fi wrapped in five copies of the new dropped each day court house squa

The M .C. Groc giving five free persons best answ pertaining to avi pear in their ads.

Intra-Mur

Fraternity

The intra-mura ney got under w ternoon with the as the first on t lively interest w by the fraternit bout on the openi bout. In the li L. S. Martin, Sig won from Kee Traylor, Theta K scrap with Elino A. T. O. took a of the Sigma Ch middleweight bo o'clock. The wi lows: Griggs, S. ta Tau: Pelot, Tau; and Edmun Alpha fraternity

The light hea were, Driggers, Rho, who fought O.; Stringer, Alp feit from Caldwel Rancher, Sigma forfeit from Wat

FROM (Florida Clipping Service, Tampa)
Key West Citizen
FLORIDA
DATE APR 16 1955

Cemetery Built On Site Of Indian Graves

24

Keys' Explorer Locates Old Indian Burial Ground

By a strange coincidence, the new cemetery on Big Coppitt Key is being built on the site of an old Indian burial ground, Ed Albee, veteran Keys explorer, said today.

Albee, who lives on Big Coppitt, has probed up and down the Keys for years, digging into Indian mounds and excavating old Indian wells. He has found bones, pottery, and odd metal objects.

Ground was broken April 2 for the 53-acre cemetery site which is owned by the Southern Keys Cemetery Corporation. Yesterday, bulldozers were busy clearing land and spreading marl which a steady stream of trucks was hauling to the site.

Albee pointed out the location where he said a row of Indian graves had been. One still remained, a clumb of small trees growing out of it, Albee pointed out.

Metal Find

He also pointed out the location of a strange circular hole which had been carved out of the rock. Three steps led down to the bottom of the hole, Albee said.

In a smaller hole cut into the side of the larger circular hole, Albee found an oddly shaped piece of metal. He has shipped this to his father, a geologist, in Massasschuetts.

At another site, several hundred yards from the cemetery site, Albee found a cannonball 12 inches in diameter.

He was digging a hole for a septic tank at the time when he uncovered a four-foot deep trench that had been cut in the solid rock. He shoveled the old fill out of the trench for a distance of about 14 feet. The cannonball was in the bottom of the trench.

Mounds Probed

Albee has no idea why or when the trench had been cut in the solid rock or why the cannonball came to be there. He feels certain, though, that at some time in the past there was a settlement on Big Coppitt — probably an Indian settlement and later a white settlement.

With the old Indian burial ground no longer available for his exploring, Albee is turning his attention to two Indian mounds — one on Big Pine Key and the other near Pirates Cove.

The new cemetery on the site of the Indian burial ground was selected by its builders after seven years of careful study of the lower Keys.

Plans call first for the development of an 11-acre tract and the construction of the first unit of a handsome mausoleum which was designed by Robert F. Richey, noted Miami monument designer.

The new cemetery will be laid out with sections set aside for Protestant, Catholic, Jewish, and nonsectarian burials.

New Cemetery

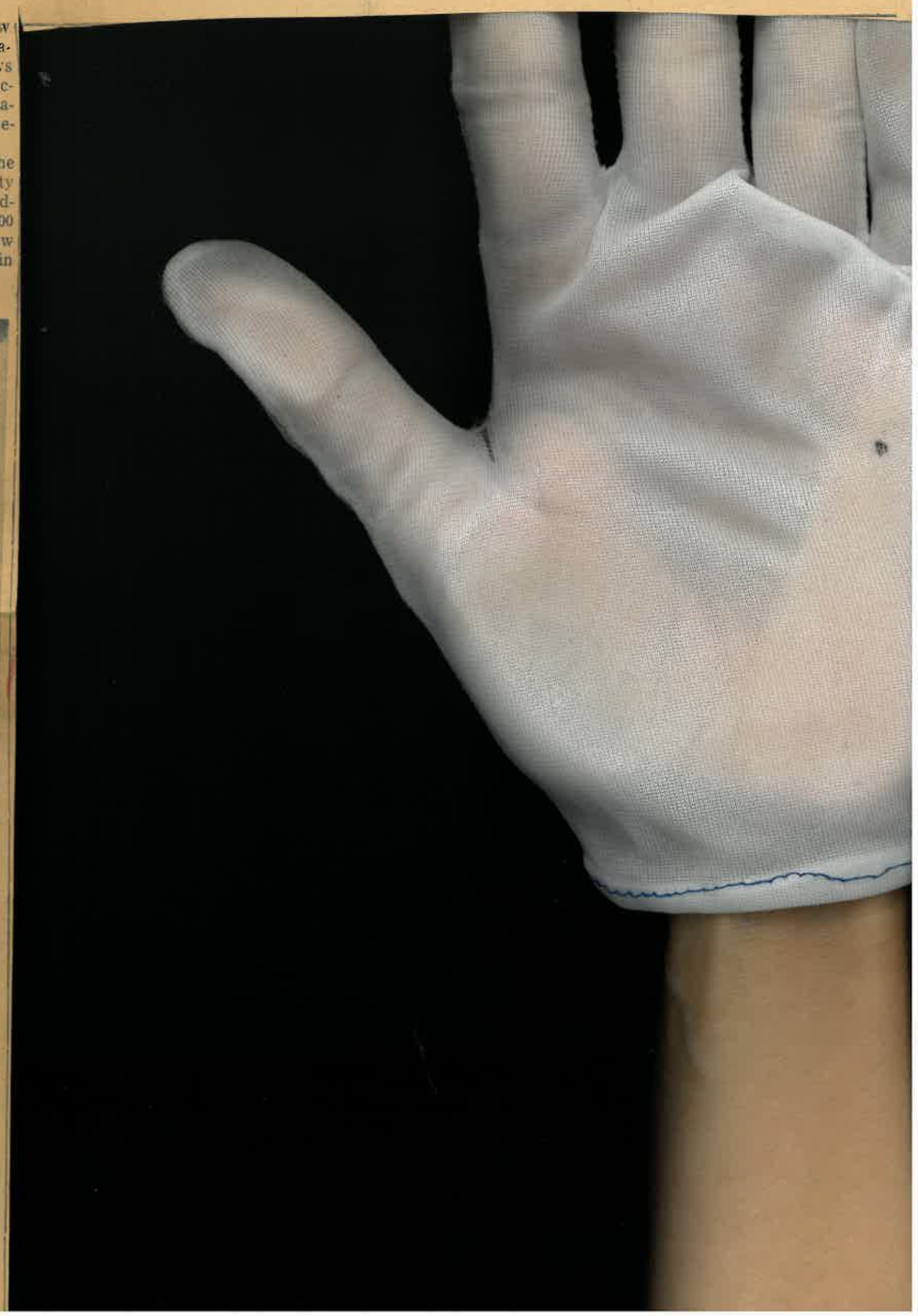
The study which preceded the selection of the site showed that Key West's cemetery is inadequate for the city's needs.

The site, only six miles from Key West, will accommodate 53,000 burials and will be adequate for 100 years.

The company also pointed to another important feature of the new cemetery — the perpetual care feature. A percentage of all moneys from the sale of plots is to be placed in a fund for the beautification and maintenance of the cemetery.

The developers added that the plans also call for a community mausoleum which will be expanded to take care of a total of 4,000 crypts. The first stage of the new cemetery is due to be completed in about five weeks.

INDIAN GRAVE—Ed Albee, who uses his spare time in exploring the keys, points to an Indian grave on Big Coppitt Key on the site of the new cemetery that is being built there. Albee said he located several old Indian graves laid out in a row in the area. Albee plans to excavate Indian mounds on Big Pine Key and near Pirates Cove.



FROM (Florida Clipping Service, Tampa)
Key West Citizen
FLORIDA
DATE APR 16 1955

Cemetery Built On Site O

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Keys' Explorer Locates Old Indian Burial Ground

By a strange coincidence, the new cemetery on Big Coppitt Key is being built on the site of an old Indian burial ground, Ed Albee, veteran Keys explorer, said today.

Albee, who lives on Big Coppitt, has probed up and down the Keys for years, digging into Indian mounds and excavating old Indian wells. He has found bones, pottery, and odd metal objects.

Ground was broken April 2 for the 53-acre cemetery site which is owned by the Southern Keys Cemetery Corporation. Yesterday, bulldozers were busy clearing land and spreading marl which a steady stream of trucks was hauling to the site.

Albee pointed out the location where he said a row of Indian graves had been. One still remained, a clumb of small trees growing out of it, Albee pointed out.

Metal Find

He also pointed out the location of a strange circular hole which had been carved out of the rock. Three steps led down to the bottom of the hole, Albee said.

In a smaller hole cut into the side of the larger circular hole, Albee found an oddly shaped piece of metal. He has shipped this to his father, a geologist, in Massasschuetts.

At another site, several hundred yards from the cemetery site, Albee found a cannonball 12 inches in diameter.

He was digging a hole for a septic tank at the time when he uncovered a four-foot deep trench that had been cut in the solid rock. He shoveled the old fill out of the trench for a distance of about 14 feet. The cannonball was in the bottom of the trench.

Mounds Probed

Albee has no idea why or when the trench had been cut in the solid rock or why the cannonball came to be there. He feels certain, though, that at some time in the past there was a settlement on Big Coppitt — probably an Indian settlement and later a white settlement.

With the old Indian burial ground no longer available for his exploring, Albee is turning his attention to two Indian mounds — one on Big Pine Key and the other near Pirates Cove.

The new cemetery on the site of the Indian burial ground was selected by its builders after seven years of careful study of the lower Keys.

Plans call first for the development of an 11-acre tract and the construction of the first unit of a handsome mausoleum which was designed by Robert F. Richey, noted Miami monument designer.

The new cemetery will be laid out with sections set aside for Protestant, Catholic, Jewish, and nonsectarian burials.

New Cemetery

The study which preceded the selection of the site showed that Key West's cemetery is inadequate for the city's needs.

The site, only six miles from Key West, will accommodate 53,000 burials and will be adequate for 100 years.

The company also pointed to another important feature of the new cemetery — the perpetual care feature. A percentage of all moneys from the sale of plots is to be placed in a fund for the beautification and maintenance of the cemetery.

The developers added that the plans also call for a community mausoleum which will be expanded to take care of a total of 4,000 crypts. The first stage of the new cemetery is due to be completed in about five weeks.

INDIAN GRAVE—Ed Albee, who uses his spare time in exploring the keys, points to an Indian grave on Big Coppitt Key on the site of the new cemetery that is being built there. Albee said he located several old Indian graves laid out in a row in the area. Albee plans to excavate Indian mounds on Big Pine Key and near Pirates Cove.

OLD CANNONBALL—This old, 12-inch cannonball was found in the bottom of a four-foot deep trench that had been cut in the solid rock of Big Coppitt Key. Ed Albee (above), who found the cannonball, has no explanation of why anyone would cut a trench in the rock.

CEMETERY SITE—First unit of new cemetery on Big Coppitt Key is on its way to completion on this 11-acre tract. The builders, Southern Keys Cemetery Corporation, say the site will be completed in several weeks. Plans also call for the first unit of a mausoleum to be built there.

UNDERWATER MYSTERY STUDIED

...r 30 years in the Air ...Thayer Olds (left) has ... the study of ground water hydrology. Here he is taking sounding with H. G. Stewart of the U.S. Geological Survey and Dr. B. F. Buie (standing), head of the FSU Department of Geology.

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...cker and Rep. Bobby ... the Wakulla commis... or purchase lands ...he federal govern... ...tion or individual. ... Jackson County ...he fee system.

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...Union Bureau

...E, May 27—Rep. ...of Nassau County ...veral bills affec... ...a Beach which ...earlier this week ... Stratton.

...ns refused to con... ...ents by the sena... ...or voter approval ... could issue up to ...ds to finance a ... program.

...y Askins were ...viding for adver... ... any construction ...d by the city.

BY RETIRED GENERAL

Disappearing FSU Lake Being Probed

TALLAHASSEE, May 27—One of Florida's "disappearing lakes" has been the subject of intensive study by a retired Air Force general who is getting a master's degree in geology on June 3 at Florida State University.

Thayer Olds of Santa Rosa Beach has studied carefully the water budget of 160-acre Lake Bradford on FSU's reservation since 1957.

His estimates of the amount of water reaching the lake and the amount lost from runoff and evaporation clearly indicate a considerable drain through sink holes to the Floridan aquifer (water-bearing stratum) below.

Sinkholes of this sort, which may be opened or closed by debris on the lake bottom, have resulted in the disappearance during prolonged dry periods of numerous lakes in the Florida highlands between the Ocklocknee River and Hernando and Pasco counties.

Several such lakes are near Tallahassee and the most celebrated one in Florida is the eight-mile-long basin near Gainesville which was called Alachua Savannah at the time William Bartram visited it in the late 18th Century, later was called Alachua Lake and now is known as Payne's Prairie.

For about 20 years prior to 1891, it was said to have been a lake and small steamboats plied its waters. Then it pulled the most famous of several disappearing acts which have occurred within historical times.

On a small scale, Lake Bradford has done the same thing, falling several feet in 1954 to leave FSU's swimming dock a quarter of a mile from the water. A large sinkhole was stopped in March 1954, but Olds' studies have shown there are still others draining off a considerable amount of the water.

After the disappearance of Lake Bradford in 1954, FSU called on the Florida Geological Survey and U.S. Geological Survey for help. H. G. Stewart of the U.S. Survey's ground water branch began a study of the lake level in relation to ground water levels nearby and Olds has continued it with the cooperation of the state and federal agencies.

He has measured the lake level and nearby ground water level weekly. Plentiful rainfall has kept the lake filled for some time but Olds estimates that if not resupplied with water the level would fall five inches a month as water flowed down into the Floridan aquifer 60 feet below the normal level of the lake.

Olds began his studies of ground water hydrology here after a career of nearly 30 years in military service.

Olds' wife also has been a student here. She obtained her bachelor's degree in anthropology in June 1960, and expects to get a master's degree next winter.

Airings Held On St. Lucie Zoning Shift

Special to The Times-Union

FORT PIERCE, May 27—Public hearings were held this week on a proposed new zoning plan for St. Lucie County.

The new plan, prepared by Dr. Ernest Bartley, Gainesville professor-consultant, includes several changes from the present setup, adopted two years ago with countywide zoning.

Simplification of regulations is one of the main features of the new plan, with some minor adjustments. It also will have more teeth in it, particularly for enforcement of regulations pertaining to junkyards and used car lots.

The County Zoning Commission will review the new resolution. If approved, it will then go to the county commission for further hearings.

Jacksonville Student Gets Stetson Prize

The Times-Union Bureau

DE LAND, May 27—Sally Mathews of Jacksonville, a junior at Stetson University, yesterday was awarded the Harry Taylor prize for the best essay on a humanities subject.

The annual award consists of $250 cash and a year's tuition.

Other presentations to outstanding Stetson student leaders at the annual Awards Day included:

Pamela Flingerland, Half Cave, N.Y., first place and $200 in the Walter Hays competition for best essay on "Free Enterprise and the American Way of Life"; Jean Donnelly of Orlando, $100 for second place.

Sally Miles of Miami, the $50 Janet Taylor Shakespeare award for the best essay on Shakespearean drama; Kate Page of Jacksonville Beach, first annual trophy as the outstanding art student; Byrd Booth, Clearwater, outstanding senior man; Charles Lipthrope, St. Petersburg, outstanding freshman; Leslie Ellwood, Vero Beach, outstanding chemistry student; Tribble Dicks, DeLand, top biology senior.

George Borders of Neptune Beach, outstanding athlete in intermural sports.

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STATE GEOLOGIST TO SPEAK

OCALA, Oct. 8.—Dr. Herman Gunter, Florida State geologist, will address the Ocala Kiwanis Club at its weekly luncheon in the Hotel Marion dining room tomorrow noon on "The Geology of Florida," according to the "Sinawik," official bulletin of the club.

Gunter Tells Kiwanis Of Early Florida Monsters

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Whales with eyes like dinner plates, horses the size of a fox terrier, dogs as big as a grizzly bear, guinea pigs as large as Farmer Brown's prize boar and giant beavers as tall as bears—not the hallucinations of an inebriated editor or a man with the D. T.'s but actual living creatures that once inhabited Florida. If there should be any Kiwanian in Ocala who needs to sign the pledge, he certainly will do so after hearing Dr. Herman Gunter, state geologist, speak on prehistoric fauna at the club luncheon in Hotel Marion yesterday.

Dr. Gunter did not say whether his giant guinea pigs were as prolific as their modern smaller relatives, but if they were—? These frolicsome little fellows lived in the Pleistocene (ice ot you) age, when portions of the peninsula stood nearly 1000 feet above sea level and there was no commercial secretary to gloat over it.

WEIRD CONGLOMERATION

A strange mixture of African, South American, Asiatic and North American animal life roamed the peninsula—including vast herds of mastodons and elephants which in the Year 1 had already discovered the salubrity of Silver Springs and left their remains there.

". . . Lions stalked their prey on Florida plains. In rocky caves, the sabre-tooth tiger waited to pounce upon unsuspecting victims." Dr. Gunter continued. "Horses of at least six species were common . . . There were three species of camel . . . and many other strange and grotesque beasts that have long since disappeared."

In the Middle Miocene Period, when a land surface formed in northern peninsular Florida, roughly from what is now Gadsden county to Gilchrist county, herds of tiny horses roamed over the plains and forests. Rhinoceros wallowed in the numerous water holes, camels were common. Wolf-like dogs preyed upon less aggressive contemporaries.

"These animals were much different than their modern counterparts," Dr. Gunter explained. "The horses were small, no larger than an average size dog and one species was as small as a fox terrier. The camels were without humps, and in general resembled a modern Illama crossed with a giraff. Their necks were exceedingly long. The rhinoceros were probably more like the modern animal in habit and appearance than any of the others. They were smaller, however, and most of them had no horn."