CLUB NEWS

Fish and wildlife management

"In the dawn of creation," philosophised William Ball, Agriculture Department head, "man was placed in an earthly environment which was brimming with the abundance of natural phenomena, and he was charged with the responsibility of managing these resources for the good of all mankind."

During the fall quarter of September 1969, the Agriculture Department of Wayne Community college announced the addition of Fish and Wildlife Management to its curriculum. This course is a two-year program offering an Associate degree in Applied Science upon completion.

Some of the most interesting and most important courses a student can have are Basic Fishery Science, Wildlife Habitat Manipulation, Plant Identification (including aquatic plants), Ecology and recreational courses.

Graduates of this new curriculum will be qualified to enter positions at the technical level with federal and state agencies as well as with private fish and wildlife industries.

It is possible for students in other agricultural curricula to transfer into this course without losing any previously obtained credits.

"Man has finally begun to realize the importance of his responsibility to nature," said Mr. Ball. "Educational programs and plans have been made to train individuals in the field of protecting and preserving our natural resources. This is the purpose in the Fish and Wildlife Management course in the agriculture department."

Watch Makers

A hearty welcome to three new students who recently joined the watchmaking class and who are also full fledged members of the WCC Watchmakers Guild: Mr. Edward S. Golden, Mount Airy, N. C.; Mr. Wendell E. Law, Lake City, Florida; and Mr. Joseph W. Bell, Smithfield, N.C.

The ole Cracker Barrel Philosopher was resting easy as I approached him for some pearls of wisdom for the WCC students for the ensuing month of April. "My heart goes out to the students attending WCC who are striving to prepare themselves to become constructive and objective citizens. I am with them all the way." "What pearls of wisdom can you give out to inspire and motivate these people?" I asked. "Just this," said the wise one, "there is no magic push button formula for success. However, there is sufficient evidence to show that if you do a little more than you have to do, success will follow because when you are an average student, you are as close to bad as you are to good."

EARLY CLOCKS: "Sir," said Professor Perkins, "a dictionary is somewhat like a clock; the worst is better than none and the best cannot be expected to go exactly true."

It is not known who made the first mechanical clock, nor when. There are various references to such clocks in Europe from about 1290 onward, perhaps the first definite one being in Milan in 1335. However establishing the existence of early mechanical clocks includes translation and interpretation of notes and documents of early clockmakers which were written in Latin, Italian, etc. Many historians reviewing these documents concluded that, in some instances, the documents could well have been referring to the waterclocks. A logical assumption is that it was evolved by different experimenters, working independently of each other, toward the latter part of the thirteenth century. China claims to have invented the first mechanical clock. Italian historians claim that mechanical clocks existed in the twelfth century. But it is well to leave this controversy to the experts. The fact that the experts are unable to determine who made the first clock or when, does not detract or take anything away from the clock story. Quite the contrary, it adds to its mystery, suspense, curiosity -- all of which will make any story exciting.

No doubt early man realized the gap left by the calendar and this realization was part of the driving force that set man out to invent an apparatus to record and measure time on a daily basis. We are familiar with the sundial which was probably their first effort. Also the hourglass, which is still in use today if for no other reason than to boil an egg. Oil lamps and candles were also used as time pieces. King Alfred the Great, according to a memorial in Medieval Latin, invented a timing candle which he placed in a horn to protect it from the draught. Then there is the clepsydra, at first simply a clay bowl so constructed as to permit water to leak out at a fairly steady rate. Rings inside the bowl indicated the passing hours as the water leaked out. All these systems were more or less unreliable although the clepsydra showed the most promise. The clepsydra was steadly improved to the accompaniment of considerable igenuity.

The Roman clepsydras, to which the Christian world fell heir were well developed, some as complex as many modern clocks. From the clay bowl came the idea of a container with a controlled leak or controlling the amount of water poured in through a funnel-like device. A float on the end of an iron rod would rise or fall thereby indicating the possing hours on a marked dial.

Later on a train of wheels was added which operated a geared rack attached to the float. The dial or face was numbered and an hour hand added. Many experts believed that this was the forerunner of the train of wheels, dials and hour hands eventually used on mechanical clocks.

As early as A. D. 605 Pope Sabinious decreed that bells should be sounded publicly seven times daily. These became the cononical hours. The bells were rung by hand. A clepsydra was probably used to tell the bell men when to ring; hence the term "water clock." Temperature changes made the water clock pratically useless at times, especially during freezing weather. Man's quest to invent a more reliable clock continued. Some experts say the mechanical clock almost certainly originated in monasteries where the inmates were primarily interested in regularly spaced cononical hours dependent upon sunset and sunrise. With them day was started by Matins at the third quarter sunrise and mid-day, Sexta was at mid-day, Nova at mid-afternoon, Vespers one hour before sunset and compliance at the close of day. Later Tertia and Sexta were combined and Nova moved back to mid-day; hence the term "noon."

The clockmakers of that time had gotten hold of a great truth. Time-keeping is nothing more nor less than the controlled leaking away of either sand, water, or some other weight or a similar control over the leaking away of another source of power such as that of a coiled or compressed spring.

The machinery of the clepsydra only wanted another kind of weight and an escapement device comparable to the dropping of water from a reservoir through an orfice. Somebody, somewhere put geared wheels together, tied a great weight to them and noting that the falling weight actually caused the gearing to turn as expected, devised an escapement to regulate the fall of the weight. More machinery and another weight was added. The specific work of this added machinery was raising a hammer which struck a cloche, a clocke, a glochen -- a bell. That's what made the machine a "clock." No dial, no hands. Just a bell ringing out the passing of hours.

There you have it, a mechanical time-measuring machine that would sound a bell, one time, with each passing hour. Then in 1335 Galvano Flamma wrote about a wonderful clock of the Beata Vergine, later San Gottardo, Milan, Italy, that had a clapper which strikes a bell twenty-four times according to the twenty-fours of the day and night. The first hour gives one sound. The second hour, two sounds, etc. and so distinguishes one hour from another "which is of the greatest use to men of every degrees," wrote Flamma. So we have an improvement in the striking mechanism which dates back to the first part of the thirteenth century. The first weight driven mechanical clocks were monstrous things weighing over five hundred pounds and measuring as much as twenty-two feet in height. They were definitely not for domestic use. Besides, only city governments using tax money could afford them. Sounds familiar doesn't it!

As has been noted, any mechanism using the fall of weight to turn wheels required a device to regulate the escape of power caused by the pull of gravity on the weight. This regulating is actually a series of interruptions in the fall of the weight. Then came the basically sound idea: foliot, verge and crown wheel, or what is commonly called a verge escapement, sometimes called the crow wheels escapement. Crown wheels are short sections of round turing with one end cut into saw teeth. Pallets or stoppers, arranged on an upright shaft which turns alternately to the right and the left, permit the crown wheel to move a bit, then stop it, and then permit it to move. In order to save the shaft carrying the pallets, a bar known as a foliot was fixed to the top of the pallet shaft, with weights hung on both ends. To start the clock, this bar was given a push. It swung right or left, permitting one pallet to disengage the crown wheel, but only until the other pallet engaged a tooth in the crown. Then it gave an impulse to swing the other way. Tick-tock! The clock was off on its run, and run it would until the weight reached the end of its pull. The crown wheel escapement, moving within its verge and so regulating the swinging bar balance, or foliot, accomplished substantially what was achieved with water clocks. The crown escapement made droplets of the reservoir of power started in the drop of the weight. A clock of this type was made by Richard of Wallingford, England in 1330 for the St. Alban's Abbey in England. An equally elaborate clock was made by Giovonni Dondi of Italy in 1364 and it survived for two-hundred years. Probably the earliest surviving example of this type of clock, built in 1386, is in Salisbury Cathedral, England.

Yes, the bell no doubt preceded the mechanical time piece. For hundreds of years the mechanical time piece was secondary to the bell and sometimes it was secondary to ornamentation. The bell was as much a part of everyday life in this period as wrist watches are in America today. Bells rang for many reasons other than to note the time of day as John Donne's line (made famous by the late Ernest Hemingway) indicates.

"No man is an island, entire of itself; every man is a piece of the continent, a part of the maine; if a clod bee washed away by the sea, Europe is the lesse, as well as if a promontorie were, as well as if a manor of thy friends or of thine own were; any man's death diminishes me, because I am involved in mankind; and therefore never send to know for whom the bell tolls; It tolls for thee."

Invention of the verse or crown wheel escapement marks the beginning of modern timekeeping. Clockmaking. Clockmaking would never again be the same. From this point the history of timekeeping involves higher mathematics, astronomy, calculus, physics, and mechanics.

This column will continue next month on the subject of "Early Clocks" and will cover some interesting inventions which are still in use today in the modern clock and watch.--John E. Lassiter.

ETE

Saturday, March 14, memers of Sigma Tau Sigma Fraternity provided a new look for campus grounds, by painting traffic humps and arrows in the main faculty and staff parking lot.

During a regular meeting of the Chapter it was noted that repeated abuse and weather conditions warranted apparent upkeep of certain areas within the parking lot. Therefore, it was agreed by the brothers that this be designated as a periodic service project.

Members of the Fraternity wish to extend their congratulations to its sweetheart, Miss Deborah Sue Walton, on the announcement of her marriage plans.

Spring Dance

Wayne Community College had their Spring Dance on Thursday, April 9, 1970, from 8 to 11 at the Wayne Center. Music was provided by the Embers for this semi-formal affair. All students were urged to come out and participate in this fun filled evening with no admission charge other than one's WCC I. D. Card. Guest cards were picked up in the Dean of Student's Office.

At the end of the regular intramural basketball season a single elimination tournament was held.

The first place Engineers (9-1) had a bye and will play the winner of the Forestry and No-Names game. In the opening game we find the Knicks (3-8) losing to the Panthers (9-3) with the score 31 to 20. The Panthers were led by the fine shooting of Eason with 15, Boone 13, and Hines 3. The Knicks were plagued with numerous team fouls and a very poor average from the floor. For the Knicks, Gainus was the high man with 8, Leary and Shealy 4 each, and Riddick and Parks 2 apiece. In the second game the Colt 45's were bombed by the Tech Originals (7-4), 51 to 21. This was the game with the highest number of assists. The entire Colt 45 team gave layups to anyone on the Tech Originals. For the Tech Originals, Simmons 18, Parker 16, and Aultman 15. For the loosing 45's Chandler managed 13, Floyd and Leonard 2. In the third game the No-Names (3-8) barely beat the Forestry Department (4-5) 22 to 20. For the No-Names, Dozier had 8, Medalark David Dannehl 6, Steve Cogdell, and Billy Broom 4 apiece. Hard driving Callow 7, Hubbard 6, Beaver 3, and Powell and Brown 2 each.

In the semi-final round the Panthers (10-3) doubled the score of the Tech Originals (8-4) to wipe them out 52 to 25.

For the Panthers big bad Eldred Boone poured in 31 big ones, Steele 9, Darnell 6, and Jones and Swain added 2. For the defeated, Simmons had 11, Parker 10, and Aultman 4. In the second semi-final game a real bone jarring, elbowing game was played. The last place No-Names (4-8) almost made the First Place Engineers (9-1) chance for a double sweep hopeless. But, when the books were checked it was the Engineers 31 and the No-Names 30. Hux 9, cold hand Coor 8, Ray Wilder and James Austin 4 each. The No-Names were led by ball hawk Giles Turnage with 16, big Steve Cogdell 6, Jones and Dozier 3, and David Dannehl adding a clutch shot for 2 points.

In the finals the Engineers (10-1) were matched up against the Panthers (11-3). The Engineers showed their stuff while the Panthers showed that they did not know anything. When the Buzzer range, the score was 40 to 30 in favor of the Engineers, who made it a clean sweep of the regular play and the tournament. For the Engineers, Pittman had 11, Coor 10, Austin and Wilder 6, Grantham 3, and Turner and Sullivan 2. For the losers, Eldred Boone had 26, Jones and Eason 2 each.

At the end of the game trophies were presented and pictures were taken by the News Argus.

We are grateful to acknowledge the fine job of refereeing done by Dean Waller and Charles Poindexter. We are also grateful to Coach Jim Bennett for allowing us to have intramurals.

NOTICE: There will be a girls basketball shoot off contest held in the Spring Quarter. Also, don't forget boys be getting up your intramural softball teams.