

MODERN FARMER

NEWSY NOTES

By Agricola

A Guide to Capella

Capella is a spectroscopic binary, which means that it is two stars so close that they cannot be separated by any telescope that astronomers have at command.

Immature birds are more brownish in color. Length of adult, about 30 inches.

Abode of Acheulean Man

In Europe there have been four glacial epochs when the climate became so cold that the continent was covered with an ice-cap, as Greenland is today.

The constellation Orion is one of the most splendid star-groups of the winter sky. It is one of the few mentioned in Scripture.

Following the practice of making a vulvar examination of each vixen every three days until a definite swelling is observed, when daily observations should be made.

The Common Cormorant

On November 3rd, 1936, a visitor brought in a large bird, somewhat resembling a Loon, but of different color and asked if I could tell him what it was.

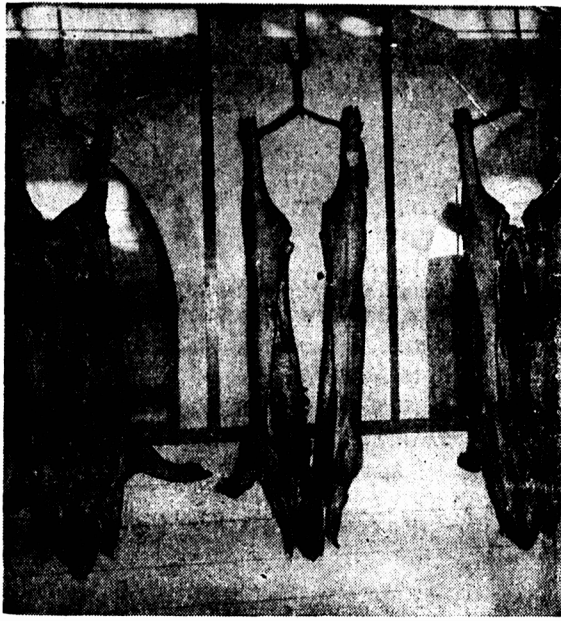
The "Shag" is also found in Europe and Asia, and most of us have seen pictures of Chinese boatmen taking fish by means of trained cormorants.

Some authorities call our Shag the European Cormorant and it was certainly the common species on the British coast.

Common Cormorant, A.O.U. 119. Summer visitor. Largest and rarest of our cormorants. Adults; plumage a glossy black, except for a patch of white near the base of the bill and another on the flanks in the breeding season.

Both species of cormorants build bulky nests of sticks and weeds, usually among rocks or on the ledges of cliffs and occasionally in bushes and low trees.

Double-crested Cormorant, A.O.U. 120. Summer visitor, frequent in the Gulf. Adults resemble the preceding species, but there is no white about the face nor on the flanks.



The two-legged pig born and raised on farm of E. C. Foote, Denmark, Colchester County, N. S.

and late third-day groups in the ratio and age desired after the 1943 and 1944 matings had been counted. Since there had been few late third-day matings in the previous two years of experimentation, enough were planned for 1945 to give numbers comparable to the previous total, plus the planned matings of each of the three other groups.

Later the 1945 matings were re-analyzed to ascertain whether they occurred early or late in the first, second or third day of acceptance. In addition, experimental matings were conducted in 1944 to determine whether early second or early third-day matings would give an optimum production of young.

With very rare exceptions, first acceptance of females was demonstrated on mornings when the males were most active. Vixens close to acceptance in the morning were tested again in the afternoon to determine receptivity. Early second-day matings occurred prior to noon and the day following first acceptance. Late second-day matings, except in isolated cases, occurred in the late afternoon of the day following first acceptance. Early and late third-day matings took place in the morning and afternoon of the third day following first acceptance. Only one mating was allowed in each instance. Following that mating, a vaginal smear was taken to determine the presence of normal sperm.

Data are available on 228 vixens (178 adults, 51 yearlings) mated on either the early first, late first, early second, late second, early third, or late third day of receptivity. The trend in the production of young foxes followed the same pattern previously reported. Information obtained from additional vixens in 1945, when added to that already procured in 1943 and 1944, merely leveled off some of the earlier peaks. The number of pups whelped per female mated late in the second day of receptivity was still high (4.90), although the difference between these females and those mated late in the third day of heat (4.64) was not so great as previously reported (5.26 vs. 4.33). Early third, early second, late first, and early first-day matings in that order, resulted in decreasingly smaller litters. Figure 2 illustrates data to determine whether there was any relationship between the time of mating and the number of pups per litter. In this study, data on the non-pregnant females were discarded, since they produced no young. The results indicated that there was no statistical significance between these two factors. Figure 2 illustrates this point very clearly, and suggests that the proper time in the estrous cycle when mating should be allowed is very important, not because of any increase in litter size, but because of few non-pregnancies.

A further breakdown of the data in table 1 shows that of the 228 females mated, 12.2 per cent aborted, resorbed or destroyed their young, 11.8 per cent were non-pregnant, 16.6 per cent whelped litters of three or less, and 58.4 per cent produced litters of four or more. In the 28 females who destroyed their young are eliminated from further consideration because of a lack of information on the size of litters they whelped, the percentage of vixens whelping three pups or less rises to 18.9 per cent, a ratio of about 1 to 5. These facts suggest that in the silver fox all the ova are released at very nearly the same time. Matings properly timed could thus normally be expected to result in good-sized litters, while those that are not can be expected to result many times in non-pregnancies.

The result of three years of experimentation during the fox breeding season indicate quite clearly that in order to obtain an optimum production of young it is advisable to allow matings to occur on the afternoon of the day following first acceptance. This time has been designated as late second-day heat. Differences in production between late second-day and late third-day matings are not great, but since many vixens are receptive for only three days or less, few fox ranchers would care to risk waiting until

Fox ranchers with large numbers of breeding animals who now follow a system of pairing matings (male and female together in a pen during the breeding season) could adopt a modified system of polygamous mating rather easily by building connecting chutes and running a male between two pens on alternate days. Observed matings should be covered by repeat matings the following day.



The best group of three beaver hog carcasses at the recent Regina Fall Show was shown by G. V. McMorris, Lewyan.

TIMELY NOTES ON TOPICS CONNECTED WITH Silver Fox and Mink Farming

The 1947 Provincial Pelt Show which was concluded at Summerside on Wednesday afternoon, had the largest entry list in all its history—over 1,100 pelts. Competition was very keen in every class. There was a large number of outstanding pelts and the average quality was the highest in years. Judge Douglas Bell had a very difficult task but he measured up to his requirements in first class shape. All the committees worked hard and deserve the greatest credit for the arrangements made for displaying, classifying and handling the pelts.

Secretary Walter R. Shaw, assisted by Stewart Wright, handled the clerical work perfectly. A complete list of the prize winners appears elsewhere in this paper.

One of the very important things in making a fox ranch pay is production. For years this subject has been studied by various authorities including Dr. C. K. Gunn of the Experimental Ranch, Summerside, who has written liberally on the subject, and recently by Dr. Charles F. Bassett, senior biologist at the United States Fur Animal Experiment Station Saratoga, N. Y. His article, "Time Fox Matings For Maximum Production" we have pleasure in presenting to our readers and we advise you to carefully study, cut out and put up for future review.

Recent studies with dogs and foxes indicate that an optimum production of young is dependent upon the time in the estrous cycle when the female is mated. Griffiths and Amoroso recommend for maximum production of young the free and unmolested mating of sexhound bitches on the second or third day following first acceptance. Whitney, also working with dogs, reported three non-pregnancies, three litters of one pup, and one litter of two pups as the total production of seven bitches of various breeds mated on the first day of acceptance. Later, in referring to the mating of dogs, he stated, "Ovulation at the first of the acceptance period tends to result in sterile mating," but from a practical point of view the optimum time to mate bitches for large litters is after the third day of acceptance."

To obtain an optimum production of silver fox pups, Rochman has recommended mating vixens on the first and second days of acceptance and repeating the mating for all females still in heat on the third day. "This procedure would undoubtedly prove satisfactory, provided one has a large number of active, aggressive males. Johansson has advised mating fox vixens on the first day of acceptance and every other day of heat thereafter. Gunn reported an average production in 1939 of 3.85 pups from six fox vixens mated on the first day of acceptance and the second day of heat thereafter. Twenty-two vixens mated on the first day of acceptance each averaged 2.91 pups, while eleven others mated on the second day of heat produced 27 young, an average of 2.45.

In 1945, Gunn reported the results of experiments conducted with 274 fox vixens during the mating seasons of 1939-1944. One hundred and sixteen vixens mated early in heat averaged 3.53 pups, with 15.5 per cent of the females non-pregnant. Fifty vixens mated in the middle of heat averaged 3.42 pups, with 18 per cent non-pregnant, while 108 mated late in heat averaged 2.23 young, but 44.0 per cent of the vixens were non-pregnant. State of heat was determined by the cell picture of vaginal smears taken at two-day intervals.

Chinchillas

I have recently returned from a visit to Montreal, Que., and where I spent considerable time studying and observing the different methods and general routine of raising Chinchillas. I visited the two largest Chinchilla ranches in that locality and acquired a great deal of information on the more advanced or fine points of ranching these little animals and will gladly answer any and all questions within my power pertaining to the industry.

Needless to say, I saw your animals and my own and found them all healthy and thriving. Yes I thought of that too—I brought home a Chinchilla pelt for your inspection and will gladly show it to you if we can arrange a meeting place.

Write or Phone for Further Particulars Limited Quota Available At \$1500.00 Per Pair

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A GOOD YEAR TO START Good Chicks EARLY!

"Buy Chicks a month earlier in 1947." That's the "urgent message" recently sent out by the Dominion Department of Agriculture Marketing Service. And here, boiled down, are the reasons it gives: Increased fall and early winter production is our best insurance for future export markets. Giving Britain eggs when she wants them (in the fall and early winter) provides the bargaining power to sell surplus eggs at other seasons. And anyway, early chicks come into lay when eggs are bringing the best prices of the year.

These are powerful arguments. And we might add this: Early cockerels usually hit a better market. If you have the equipment, early chicks are no harder to handle than later ones. And you have more time to give them really good care than you have later on.

LIVABILITY AND GROWTH MAKE A BIG DIFFERENCE

Anyone who has raised chicks knows that there is a big difference between different lots. No matter how good they may be in other respects, they are not going to be much good to YOU unless they live well and grow fast.

Ask Any of Our P. E. Island Agents:

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left by men who lived there, as they fled from the rising waters. Possibly they thought that the waters would soon sink and they would then recover the tools. But that was not to be in their own time, or even their great-grandchildren's for their old home remained under water for thousands of years!

Under one roof were tools which had fossilized teeth of giant beacons imbedded in them, and at other places there were piles of fossilized bones. Nowhere, at any site in Europe or Africa, has any skeleton of Acheulean man been found, so it is believed that the dead were not buried but left to be devoured by animals. It may be however, that someone was drowned in the ancient lake and his (or her) skeleton may yet be found.

Before the Masai would turn over the ground, they asked why the white men wanted it? For the bones? They saw no reason at all for wanting to save what appeared to be piles of stones, not as useful nor as well made as their own weapons! When they were shown a fossilized hippopotamus they were convinced that there was reason in the white man's whim and surrendered the site.

Carrying Capacity of Sounds

This is a tip for those proposing to broadcast music. A band, playing the distance, is always heralded by the dull thump! thump! of the bass drum. As the trumpet, the ear recognizes the bass instruments, the big trumpets, etc. Now it is marching past, and the melody is predominating while all the subordinate instruments are in perfect balance. This is the moment we have waited for!

RICH IN FOOD VALUE

Milk provides just about everything in food value—calcium, protein, minerals and vitamins—and should be chosen in preference to other beverages, advises the department of national health.

ATTENTION MILK PRODUCERS

We are now taking orders for spring delivery on DE LAVAL SURFACE COOLERS CURTIS COPELAND CAN COOLERS DE LAVAL MAGNETIC SEAWAY AND STERLING MILKERS DE LAVAL SEPARATORS—Hand or Motor Driven.

We have on hand a good supply of 100 and 80 lb. milk cans and expect delivery of 50 and 30 lb. cans shortly. We can also supply you with parts for all De Laval Separators and Milkers along with complete repair service. Now is the time to get that separator fixed up for spring.

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Earliest Quality Tomato Yet Developed. Of immense value for the North and West and other short season districts. Highly productive. Produces a large crop of early set producing fine quality ripe fruit as much as two weeks or more before most other varieties. Has been a sensation on the Prairies since 1945, including such districts as Montana, Idaho, Utah, Oregon, Washington, and British Columbia. It is distributed under the name of "Alberca" gardeners were urged to plant it early in the season before other varieties. At Morden, Man., it has yielded as much as 20% to 40% greater crops than other good early. Early Chatham in dwarf, non-staking, and may be planted as closely as two feet apart. Fruit uniform in shape and colour; delicious quality. Average about 2 1/2 inches across but frequently larger. Order direct from this advertisement. (PG 194) (as 75c) postpaid. FREE—OUR BIG 1947 SEED AND NURSERY BOOK—Lends About 22 DOMINION SEED HOUSE, GEORGETOWN, ONT.