The duck that lays golden eggs

his year sees the introduction by the American duck and goose breeder, Metzer Farms, of their new Golden 300 Hybrid egg producing duck. To find out more about this bird, and Metzer Farms' other activities, International Hatchery Practice recently visited their operation at Gonzales, near Monterey in California

The origins of the business lay in John Metzer's, the company's founder and owner, father's hobby of duck breeding. Initially, he just produced a few birds for his own interest but in time began to supply ducklings and some goslings to people in his neighbourhood. Thus, John was introduced to duck and goose breeding at an early age.

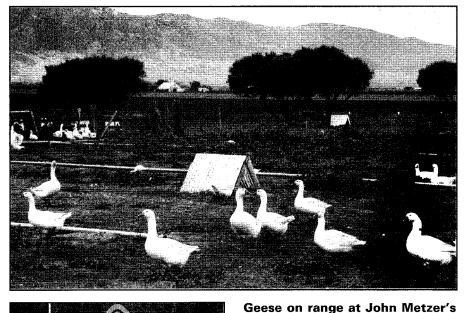


In the late 1970s John gained a degree in animal science from the University of California, Davis, and in 1978 he established Metzer Farms.

Initially, he only produced ducklings for feed stores, balut (a dietary delicacy of the Vietnamese and Filipinos in California) and salted duck eggs. Balut is a dish that is comprised of cooked 17-day-old embryos.

In the USA, feed stores basically provide the farmer with everything he needs for his farm. They have traditionally traded in small orders of day-olds of various species for the smaller farm and, in more recent times, for those Americans who are seeking a rural lifestyle.

Within four years the Metzer





meat customers. Metzer Farms

farm. Note the nesting box or

Farms operation was also producing goslings and by 1986 their hatchery was the first to offer a sexing service.

In 1988, the company started importation of duck breeding stock from the Danish breeders, Legarth, in order to improve the quality of the ducklings they supply to their commercial duck

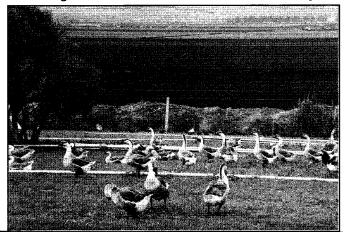
meat customers. Metzer Farms became their North American representative. That relationship still continues although Legarth became Broholm and finally Nordam Breeders of Denmark.

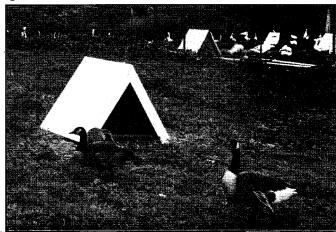
Around this time Metzer also began selling Muscovy ducklings from Grimaud of California. In 1990 they introduced Broholm's Berlill meat duck to North America and in 1994 the B200 (now known as Nordam's N200) was introduced.

Metzer Farms has not just produced the modern hybrid types of ducks and geese, they also have an active market in traditional or pure breeds.

This started with White Chinese, Embden, Toulouse and Af-Continued on page 9

African geese (left) and their Canadian counterparts (right).





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rican geese and through the years has seen the introduction of duck and geese breeds with names as diverse as Chocolates, Black Indian Runners, Blue Indian Runners, Mallards, Canadian Geese, Large Dewlap Toulouses and culminated in 1995 with the Brown Chinese and Super African geese.

Location and flexibility

In many ways Metzer Farms' success has been based on their location and flexibility. As far as location is concerned California is on the USA's west coast and as such has a large oriental population that has a requirement for duck and goose products.

In addition, the company is well located to ship products to one of its important customer sectors — the Hutterite colonies in Montana, the Dakotas, Canada and other US states.

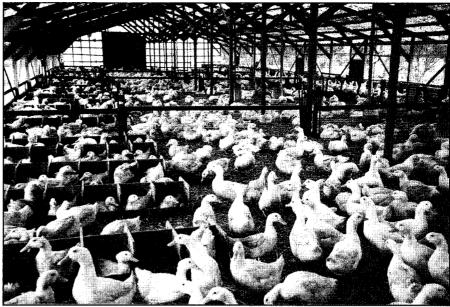
There is also a strong market for breeding stock north of the border in Canada.

Now Metzer is able to ship orders of day-olds as small as 10 birds throughout North America and can cater for smaller orders via the feed store approach.

Finally, the farm is located in a Californian valley that runs down to the sea. Thus, there is a maritime influence that removes the extremes from the weather experienced. In the summer the farm is slightly cooler and in winter slightly warmer than much of its surrounding area.

"This is certainly appreciated by the ducks and geese," John told us, "and is also reflected in their performance."

From a business point of view



Inside a laying house — note the nest boxes.

their end product portfolio provides a unique degree of flexibility. Extra duck eggs are deliberately produced and all, except those for salted eggs, are set in their incubators.

After 17 days of incubation a determination is made of the number of ducklings needed in 11 more days and sufficient eggs are left for these orders. All other eggs are removed from the incubator and sold as balut. Thus, no egg is wasted.

Specially designed blower

In addition, there is an interesting market for infertile goose eggs.

They are blown by a specially designed machine. One hole is bored in the end of an egg. It is then placed over the machine, which first blows out the contents with compressed air and then enters a washing cycle to clean the inside of the egg.

It is preferable to do this to infertiles that have been stored for a week or more at room temperature as their contents are more fluid and, hence, more easily removed.

These blown eggs are sold to local artists and craftsmen. They make decorated ornaments out of the smaller eggs and the larger ones are made into jewellery or music boxes.

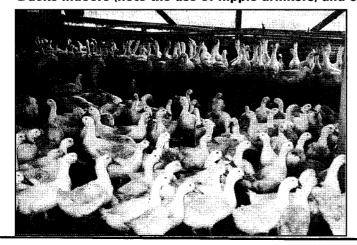
The Golden 300 Hybrid egg producing duck was developed because John was never satisfied with the Khaki Campbell as an egg laying duck.

"When in smaller groups the Khaki Campbell performed well but once you increased flock size performance was dramatically reduced," John advised us.

Whether this was a function of stress associated with a larger flock size or the lack of regular human contact, which the Khaki

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Ducks indoors (note the use of nipple drinkers) and on a verandah.





Continued from page 9 Campbell appears to appreciate, John could not say.

In the remainder of this article we will consider the day-to-day workings of Metzer Farms.

Virtually all the geese are now reared on the range. They are fed in troughs and watered by bell drinkers. The latter are often located over a small area of slats to minimise poaching of the ground.

Throughout each pen are little nesting huts or duplexes. It is found that the geese need to be rotated with sheep as they will only graze the grass.

The sheep will gladly graze the



The external view of one of the duck houses.

John has found that it is not necessary to provide an area of water for the birds to swim on and this greatly facilitates the management of the geese and their pastures.

Table 1. The gains made by Metzer Farms' Golden 300 Hybrid egg producing duck.

	Golden 300 Hybrid	Khaki Campbell
Egg production in 40 weeks	230	195
Egg weight (g)	82	76
Fertility at 10 days (%)	93	90
Hatch of fertile (%)	88	83
Mortality during lay (%)	3 .	4
Pounds of feed/duck/day		
during lay	0.40	0.36
Temperament	calm	excitable
Consistency of production	very good	average
Female colour	browns and whites	pure brown
Sexing	feather	vent
Price/female (\$US)	2.40	2.20
Price/duckling (\$US)	1.25	1.05
Age at 5% production (weeks)	23	22
Females/male	5.75	6.0
Weight of female at 23 weeks (lbs)	4.65	4.15

Historically, the breeding ducks were housed in houses with outdoor runs.

Here again, these were found not to be necessary and now virtually all the ducks are reared and bred indoors.

Invariably, the ducks are only kept for one laying season but the geese are retained for eight or nine seasons.

The ducks are housed in pens which contain a maximum of 300-350.

The birds and are bedded on a mixture of straw and woodshavings.

"The local arable farmers who take the litter at the end of a cycle prefer a wood shaving-based litter and this is our preferred choice for the ducks," John explained. "But in California there is a significant price differential between shavings and straw so, we have to have a commercial compromise!"

Normally a mating ratio of one drake per 5.75 females is used and the ducks are kept on restricted feed until 40% or more of production has been achieved. Then the feed intake is no longer controlled. All the ducks have access to 'free choice' minerals.

The ducks are kept in their groups by age and, as eggs of each breed are co-mingled at the hatchery, specific group data on breeding performance is not available.

However, overall a fertility of 91-92% is achieved on some 5,700 eggs laid per day with a hatchability of 75-80%. Eggs are collected daily.

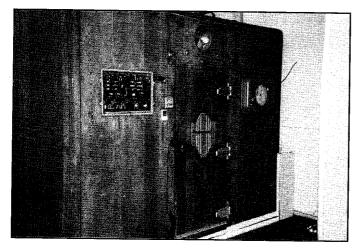
The sequencing of flocks is planned so that maximum pro-

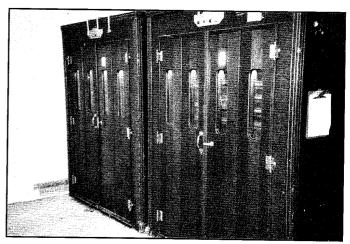
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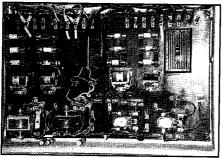


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Continued from page 11 ductivity is achieved in the spring which is when most sales of dayolds occur.

The eggs are collected on to trays and transferred to the hatchery. Here, they are washed in an Aqua Magic machine and then graded.

Machines in original form

Buckeye redwood incubators that were manufactured in the 1940s are used for the duck eggs and, except for the addition of a digital temperature recorder for ease of reading and checking, these machines are very much in their original form.

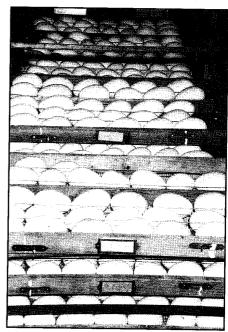
Prior to setting the goose eggs,

Above left is the Buckeye setter used for duck eggs and next to it is an American Petersime setter that is used for goose eggs. Left is a close-up of the latest 1940's electronics and right an internal shot of the Petersime. If you look carefully, silicone can be seen on some of the eggs. It has been used to seal cracks and salvage eggs. The hatchability of such eggs is only marginally depressed.

they are cleaned and the cuticles removed with a chlorine based detergent. The goose eggs are incubated in American Petersime incubators that are of similar vintage to the Buckeyes. These setters are of a paddle type and eggs are transferred to Petersime Skyline Pulsator hatchers.

The goose eggs are valuable so any cracks are sealed with silicone. Although the hatchability is slightly depressed, this practice saves many goslings that would otherwise have been lost.

In a couple of decades John has converted a hobby into a successful business. However, the story is set to continue. Work on a new goose to meet the specific



needs of a smaller bird for the West Coast Chinese meat market is well underway. In the near future, new duck breeding facilities will come into production.

By specialising in niche markets, Metzer Farms have found the geese (and ducks!) that lay golden eggs.

Surplus duck eggs are salted (left), while the clears on the right are stored at room temperature for a week prior to being blown.



