



SKOV's technical seminar was well attended by technicians and service teams in Terrigal, NSW

SKOV technical seminar held in Terrigal NSW

By **PETER BEDWELL**

In July, SKOV ran technical seminars at Terrigal on the NSW Central Coast and also in Melbourne and on the Gold Coast.

Poultry Digest attended the Terrigal seminar on July 5 where 30 technicians from SKOV distributor and service teams were present for technical training sessions presented by Arne Overgaard (SKOV Export Manager) and Tommy Krogh, SKOV's climate and poultry production specialist.

The purpose of SKOV's technical seminars is to help their distributors' field staff to assist growers in getting the best results from SKOV technology.

However, SKOV is a dynamic company and is always on the lookout for ways to improve poultry production and, through better efficiency, profits.

At a time when feed costs are spiralling, new feed solutions are essential not only for profitability but the sustainability and reliability of the food supply itself.

So at the start of the technical seminar session, Tommy Krogh revealed that while in lockdown due to COVID and thus unable to perform some of their regular tasks due to movement and general restrictions, they got busy on a new project.

Insect farming, specifically growing the Black Soldier fly insect larvae for poultry feed and waste disposal, is attracting attention in many markets including Australia and Europe.

Creating the optimal conditions to raise commercial quantities of larvae is just the kind of project that SKOV's engineers and researchers relish.

"SKOV worked with Carsten Petersen, CEO of Enorm, a company dedicated to developing insect larvae as an alternative feed source for livestock and potentially in the future for human consumption.

"Enorm's insect production site at Hedelundevj in Denmark, will soon be producing 100 tonne of living larvae a day, which will require 400 tonnes of liquid feed," Tommy said.

"The larvae can be converted to high quality protein, fat and even insect flour," he added.

Like broiler birds, rearing Black Soldier Fly Larvae require precise control to create a uniform climate.

"The process generates a lot of heat, so we have to manage that," Tommy said.

"The larvae require only two days to incubate and 12 days to fully grow when they can be harvested."

Tommy described the equipment developed by SKOV, a 40 FT insect container and an automated control system with a touch screen similar to the company's chicken shed controllers.

"The insect containers have been placed in 7 x 12 x 80 metre sheds which will be producing 100 tonnes of larvae a week," he said.

The next new concept Tommy spoke about was the move in Europe towards placing fertilised eggs in the shed, so the birds went from hatch to market weight in the one location.

SKOV has been following this practice on its own farms, as reported in the April/May 2022 edition of *Poultry Digest*.

Tommy explained the process to the group and its obvious advantages.

"SKOV has achieved excellent results rearing slower growing genetics

(49 days)," he said.

We heat the shed to 33/34 degrees C floor temperature and the eggs are candled at 18 days.

"We achieve a higher hatch rate than using a conventional hatchery and overall productivity improves by 12-14 %.

"There is also a welfare benefit for the hatched birds as they have immediate access to feed and water and so get a good start.

"There is a cost saving on heating as this approach relies on electricity rather than increasingly expensive gas," Tommy explained.

Ventilation was best achieved in side mode, which in itself is more energy efficient.

Apart from SKOV's in-shed hatching in Denmark, the practice is being used in Belgium and The Netherlands, where similar gains in productivity and welfare benefits have been recorded.

Poultry Digest discovered these benefits while looking further into in-shed incubation methodologies.

Obviously, there is an increased labour component, but Tommy stated that "with good management practice, the extra tasks were more than offset by productivity benefits".

"What to do right to achieve a top result depends on good feed and water quality, good housing, good genetics and good health and biosecurity," Tommy said.

"Costs in the overall broiler production process are, for the integrator feed (the big one) and day-old chick supply.

"For the contract grower, the costs are interest and depreciation, heating (gas and electricity), washing, litter, soap and acid and removal of mortalities," Tommy said.





SKOV BlueFan BF 50

Perfect fan for renovations and new build

Retrofit

It is easy to replace existing box fans with the new BF 50. Installation is so quick, that it can be done between batches:

- Arrives assembled – a robust fan that is easy to install
- Fits in the existing holes in the house – no need for new building structure
- Reuse the existing cables in the house – easy additional wiring for motor-controlled shutter and LPC variable



◁ “Where we as a company can help, is by creating the right set up in energy use with LPC fans to start cooling and HPC fans in side mode and correct use of chill fans.

“In heating, requirements are the heat source, humidity settings, mini vents (CO2 control) and litter management, are all critical factors.

“Pay attention to the climate demands of the bird, such as air speed (draft-cool breeze), humidity and litter quality, temperature, light, stability, uniformity and air quality.

“Observe bird behaviour. With correct temperature setting the birds should be evenly spread throughout the house.

Of note, Tommy stated that “up to 10% of the birds have to show signs of being too hot to gauge the correct setting”.

“However, if too many of the birds are lying alone gasping for air, that is too hot!

“Too cold, and the chickens form small groups throughout the house and along the walls.

“Use your senses, smell, sight, taste and touch when monitoring your flocks and surveillance cameras can be helpful,” Tommy said.

“Aviagen flock management tips for broilers state that “when evaluating the effectiveness of brooding procedures, the difference in CV% from placement to seven days will show how good your brooding set up is.

“If CV% at seven days is greater than 3% than at day old, review brooding practices, look at temperatures, feed, water and lighting,” Tommy advised.

“I don’t like night setbacks. Birds need a consistent temperature both day and night.

“We use too much water and a lot of moisture can be transferred from the outside environment which can result in wet litter.

“In a typical modern broiler shed, it is not unusual to have to eliminate the equivalent of 60 buckets of water from inside a shed and apart from welfare and production issues that results in increased energy costs.”

Tommy’s final comment was that for the farmer using SKOV control systems, there were only a few things to set in a shed controller; a three-level password system was a desirable feature.

Arne Overgaard next gave an update on SKOV’s BF 50 BlueFan.

The original BF 50 BlueFan was first launched in May 2020 and was tested on a Brisbane farm that had sheds ventilated with the SKOV Combi Tunnel

system that had been operating for more than 13 years.

Arne spoke about new variants to the product with system improvements, BF 50 fan tests in Australia and South Africa and the BF 50 vertical installation.

“The BF 50 has the same dimensions as an EM 50 fan or Box 50 inch fan (1380mm x 1380mm x 450mm) and key accessories include a cone (cone fitted fans shipped as a complete unit).

“Other accessories are outside safety mesh for cone and safety mesh without cone.

The BF 50 has an option on/off air controlled direct driven with an AC motor.

“The LPC has a permanent magnet (PM) motor, is direct driven with motorised opening on the shutter. There are two variants, Variable on/off and Stepless operation,” Arne said.

“The direct drive eliminates maintenance and the design is highly corrosion resistant.

“The BF 50 system improvements include precise control of minimum ventilation. It eliminates DA 600 and 36 inch box fans with higher performance at a lower price and is easy to use for retro fitting in existing shed wall holes.

“The BF 50 is now stepless for dynamic multistep systems. Arne explained why Dynamic Multistep.

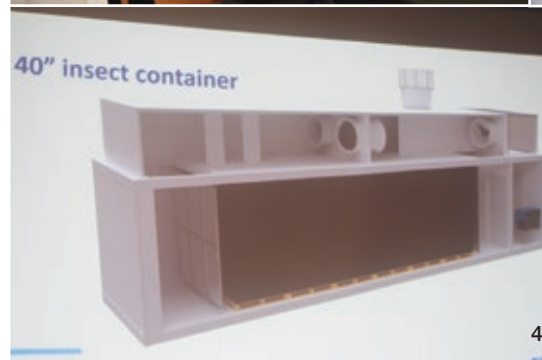
Arne explained BF 50 fan tests in Australia without cone shoulder by shoulder and with cone and minimum distance between the boxes of 20cm.

“The result was a 10% higher performance and 10% lower energy consumption,” Arne stated.

“Australian fan tests over four batches with EM 50 inch against the BF 50.

Batch 1- 43% savings in energy usage, Batch 2- 51%, Batch 3 - 46% and batch 4 -51%.

The seminar ended with a group discussion around the day’s topics and ideas.



1. SKOV BF 50 fans at the ProTen sheds in Griffith.
 2. Arne Overgaard gave an update on the fans.
 3. Tommy Krogh, SKOV’s climate and poultry production specialist.
 4. Insect container to create optimal conditions for growing the Black Soldier fly insect larvae for poultry feed and waste disposal.