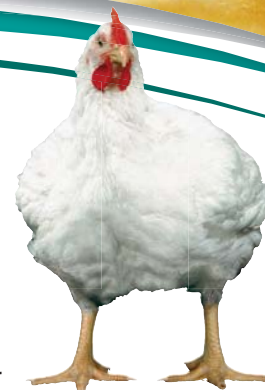




Hubbard

YOUR CHOICE, OUR COMMITMENT



Edito

Dear readers and business partners,

Thank you for joining us in taking a look at the latest news and events concerning Hubbard across the world.

You will discover your fruitful successes, boosted by a wide range of products which are adapted to your needs and your environment. Hubbard is the common denominator allowing you to produce the most meat, of the highest quality, while using less feed.

Hubbard products have proven to produce the highest live weights of chicken to kilograms of feed, everywhere internationally. A year ago Hubbard started its campaign of "Less Feed, More Meat", showing the efficiency of our industry and its sustainability to feed our ever-growing population.



Rest assured we reiterate our commitment to invest more human means and financial assets to innovate successful genetic breeding, as well as offering you products that will continue to fuel your success in the years to come.

In this newsletter we are shining a light on the successful technical results we see every day on a PS and broiler level, everywhere in the world.

All the worldwide Hubbard teams and I wish you a pleasant reading. We all stay fully dedicated and motivated to supply you with the highest quality breeding stock while helping you in maximising their full genetic potential.

Sincerely,

Olivier Rochard
Hubbard CEO



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"Observe to anticipate the future in the best possible way"

1

**Special FOCUS on...
HUBBARD
TECHNICAL SERVICE**

Hubbard's main aim is to provide the best products to its customers and producers in the broiler industry to answer their different demands, regardless of their administrative, geographic, economic, health and cultural constraints.

Once the products have been delivered, Hubbard accompanies their clients in obtaining the best product performance in the field with the support of a pro-active, reactive and solid technical team of specialists.

In this article we meet Mathieu Lardière who has been working as International Technical Specialist in Hubbard for 2 years. He will describe what the mission of technical follow up consists of through his experience with one of our distributors, SUOMEN BROILER OY in Finland (Suomen Broiler).



Interview...

①. Since when have you been working with Suomen Broiler Oy (more information on page 6)?

I have been working with the Suomen Broiler team since April 2013.

② How many technical visits have you made to Finland since April 2013?

I have made seven technical visits, each of about one week.

③ What does your work consist of?

My work with Suomen Broiler is basically divided over two parts: the first part is the technical follow up of the GP flocks and the second part, the technical follow up of the PS, visiting the flocks during the rearing and the production phases.

④ How would you define the "Technical Mission" in the poultry industry?

To me, the technical follow up in the poultry sector consists of several phases:

① In a first step: the analysis of the field data. This analysis will give you an idea about the strong points, but also about the improvements which need to be brought.

② In a second step: the actual visits of the flocks in the field. During this visit a good observation of the birds, of their behaviour and also of the environmental conditions is critical. This requires to spend a good time enough inside the houses.

③ These two steps finally come together in the recommendations made at the different meetings during the trip, and in the written and illustrated visit report I make afterwards. These recommendations are, of course, adapted to the local situation of the customer.

My opinion is that we can define the technical service in the poultry industry by "observing to be able to anticipate the future, in the best possible way". The technical service in our poultry environment needs above all a *pro-active approach*.

⑤ Why is the technical part so important for the success of a customer?

The technical support allows a customer to learn more about our products and to adapt the management to their local circumstances. The technical advisor has an important role to support, explain and guide the customer in his job and to work to maximise the performances of the Hubbard products.

⑥ What are the difficulties you can have to face in the practice of your missions?

I would say that the access to reliable field data is essential but often a very time-consuming exercise for the technicians. Without this critical information it is impossible to provide efficient technical advice.

⑦ How is the technical Hubbard team around you organised?

We can divide the Hubbard team into three main domains:

① The services that contribute every day to the success of our customers: e.g. Production, Hatchery, Quality, Planning, Logistics, Sales, Marketing and Technical service, etc...

② The specialists: in fact many specialists with a specific focus on the different parts of the chain allow us to respond as good as possible for each specific case: broilers, quality, nutrition, hatchery, veterinary, etc...

③ The technical team is a melting pot of a huge number of field experiences in different environments with a variety of issues.

At the end, this diversity of specialists enables our team to provide our customers with the best possible answers and solutions."

More interaction...

To bring an additional service to these field visits, or also to respond to the actual needs of the customer or of his technical team, Hubbard also organises technical seminars.

These seminars aim to assure the best knowledge of our products and management techniques, leading to the best performances sharing questions, information and experiences, in the customers' environment. As an example, Alastair Lewin, Hubbard Senior Technical Service Manager in Asia and the Middle East, works closely together with our direct partners and Hubbard's local teams to optimise the resources and the results.

Let's follow Alastair and note the very positive results of such meetings through the last sessions organised with the cooperation of our Hubbard Classic partners in Bangladesh, India and Egypt.

❶ During last April, the Hubbard technical team led by Alastair Lewin and Ehsanul Kabir (Mosru), Technical Manager for Bangladesh, visited the Grandparent and Parent stock facilities of the Hubbard Classic customers Paragon Poultry and AFTAB.



Paragon Poultry Ltd

The meeting at their HQ in Dhaka covered all the technical points of the visit made. Present for Paragon (top picture) were Mrs Yasmin Rahman, Director, Eng. Zahidul Islam, Manager of Technical Service, and Dr. Lutfor Manager of Paragon Laboratory.

AFTAB Bahumukhi Farms Ltd

The new day-old-to-death Grandparent facility (here on the right) at Chunarughat houses received its first GP flock which is peaking well. The new design double story houses have been modified for improved biosecurity control. Each floor has its own shower unit and all workers must shower before entering the house. The front of the farm has been specially constructed to include quarantine facilities for all returning workers and offers excellent living accommodation.



❷ In India, the technical team is managed by Alastair Lewin and Kapil Manwal, Hubbard Technical Manager. They gave recently a variety of presentations after an exhaustive period visiting many Parent Stock farms in the Karnataka, Tamil Nadu and Nashik regions and the Hubbard Classic GP customer Suguna.

-Hubbard Classic PS customers:



Karnataka region: Dr. Gangadharan GM (far right), and Dr. Karunakaran on the left and the DGM's.

Nashik region: Mr. Pem-maiah GM (on the right) and his team.



-Hubbard Classic GP customer Suguna: Dr. Joshua Coilraj and the GP Sector Managers.



The progress of the **Hubbard Classic** PS female is excellent and from the start, the bird is performing up to the standards or even better. It is well noted in the field how easy it is to rear the Hubbard Classic and to maintain a good uniformity.

It is also noted by the customer how easy it is to grow the **Hubbard M99** breeder male and how little feed is needed during the production period (some 15g/day less than the breeder males of competitors) and how few males are required to achieve an excellent fertility.

❸ In Egypt, the female **Hubbard Classic** has reached a strong position thanks to excellent field results.

During February 2014 the Hubbard technical team organised several meetings for the technical managers and technicians from customers using Hubbard Classic. Hubbard strongly underlines the importance of teamwork and the technical exchanges that such seminars can bring to get the maximum output and to further improve the results in the field.



The main meeting was with **Cairo Poultry Grand Parents**, our long-time Hubbard Classic distributor. The technical team led by Eng. Ezzat attended the meeting along with key members from the Grandparent section and the Hubbard technical team. Relentless hard work and enthusiasm coupled with belief for the product has brought the **Hubbard Classic** package into 2014 with very strong performance at both Parent Stock and broiler level.



From right side: Eng. Ezzat Manager of Technical Dpt. Cairo Poultry Grand Parents, Eng. Medhat, Eng. Enas, Thomas Verrey and Jean-Louis Gac (Hubbard), Eng. Mohamed Samy, Eng. Osama Khalil, Eng. Attalla, Dr. Ahmed Hassan.

During the same trip, Hubbard organised other meetings including our longstanding customers Dakahlia Poultry and Egyptian Saudi for a technical review and exchanges to underline the management key points and updates. There was lot of enthusiasm among the teams during the presentation of the field results, which confirm Hubbard Classic's strong position in the Egyptian market.

take pride of the Hubbard Classic's robustness and adaptability across many management situations. The North Georgia region of the US is one of the most challenging areas to grow pullets and to produce optimum breeder performance. Yet the Hubbard Classic's success is a tribute to many factors including the balanced breeding and overall persistency of lay" adds Josh Cox.



2

**Hubbard
DISTRIBUTORS
NETWORK**

AMERICAS



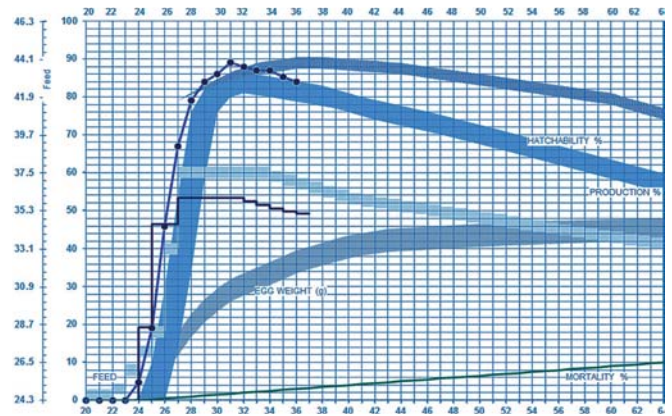
MORRIS LEADS THE CLASSIC INTRODUCTION INTO THE U.S. MARKET

Morris Hatchery is a US-based company dedicated to the supply of hatching eggs across many continents. They originally hail from Florida but today they sell hatching eggs to a wide assortment of customers on multiple continents. The company places 1.7 million Parent Stock, primarily in the state of Georgia. They also have a new state-of-the-art broiler hatchery in New York State to fulfil their large customer base in the Canadian market. They also have two additional hatcheries in south Florida that supply alternate stock, quail, layers & turkey poults.

The **Hubbard Classic** has been a successful introduction for Morris since its initial placement in 2012. The company had already been successful with the Hubbard M99. "The company was looking for a breeder with tremendous reproductive traits and feather-sexable fast growing broilers. In the hatchery business egg cost is key and Hubbard was able to provide that option", says Jay Daniels, Hubbard's key account manager for Morris Hatchery. Jay adds, "We already had established excellent M99 sales performance through many years of partnership, so the addition of the Hubbard Classic to their product portfolio was a natural."

Josh Cox, Technical Service Manager of Hubbard, has serviced the flocks since coming on board with the company 4 years ago. The pictures below shows some of the many Hubbard Classic breeder flocks in rearing and production during one of Josh's multiple technical service visits. "The breed is very versatile and we can

Egg numbers as illustrated below continue to be a strenght of the Hubbard Classic. The performance is very repeatable across multiple flocks and farms. You can check the excellent peak and productivity of the Hubbard Classic at Morris Hatchery on the following graph:



Hubbard LLC will continue an aggressive expansion program of Hubbard Classic product placement throughout 2014/2015, with the product placed inside other major integrations and independent hatching egg suppliers.

ASIA



HUBBARD IN INDONESIA: GOING FROM STRENGTH TO STRENGTH

Hubbard is proud to be associated with the Sujaya Group who are the official distributor for Hubbard Classic for Indonesia. In West Kalimantan, Satwa Borneo Jaya Breeding Farm (SBJ) of the Sujaya Group was created. The most modern Grand Parent farm was constructed to produce the highest quality Parent Stock for their own PS farms and in future for outside sales.

Grand Parent stocks are placed every 13 weeks in brand new farms under a strict technical and biosecurity regime approved and supported by Hubbard. The objective is to double the capacity over the next two years.

The inauguration ceremony was attended by top management from both Sujaya and Hubbard companies, and the local Government of West Kalimantan Province.

In addition, PT Satwa Borneo Jaya Breeding Farm was recently certified as an Avian Influenza free compartment farm by Indonesia Ministry of Agriculture. This enables their Parent Stock to be accepted by all provinces, a very good achievement in such a short time.



Here the owner Sujaya family: Mr and Mrs Tetiono, their son Hendra (left) and son-in-law Surya (right).

PT. Satwa Borneo Jaya (SBJ) breeding farm is Indonesia home land for Hubbard Classic. As a first step, SBJ will receive 24.000 female breeders and will double the capacity in 2015.

SBJ will become the leading company at Kalimantan Island and one of the leaders in Indonesia with the Hubbard Classic Grand Parent Stock placements. Sujaya group as an integrated partner, will adjust their feedmill production.

Today they have a capacity of 10.000 tons per month, and they target to upgrade their production to 50.000 tons per month; they are also targeting a commercial chicks production of 240.000.000 day-old-chicks per year. Their broiler farms are equipped with cages system, and their Parent stock, broiler farms and slaughter house are located differently to match with high biosecurity requirements.



Here from left to right: Mr. Anthony, Development Director, Suryenta and Jeff Sharp, Hubbard.

David Fyfe, Hubbard Business Director for Asia, is both proud and pleased to be associated with the Sujaya Group: "We believe the Hubbard Classic will produce excellent results in Indonesia, we are working with a very professional company and we will provide all the necessary technical support to help the company to achieve its objectives of making Hubbard a leading product in the market."

NEW DEVELOPMENT OF DABACO - VIETNAM



Dabaco is one of the biggest integrations located in Bac Ninh Province, an hour drive from Hanoi city. Their main business is to produce feed for their own use and to sell it locally. They are also in the poultry business with broiler Parent Stock and layer Parent Stock. They have started of a new project with a new farm with a capacity of 150,000 Parent Stock, using a cage system. Hubbard is assisting them with their experienced technical team for the training program for the Artificial Insemination program.

Hubbard and Dabaco have a great business relationship for more than ten years which is becoming even closer and closer now. Dabaco has full confidence in Hubbard's quality of products and technical support.



This year started very difficult for the Vietnamese poultry industry, because of the bird flu epidemic. However a big integration like Dabaco suffered less and they made a decision to shift their main poultry business to the Hubbard Color products. They are importing the **Hubbard JA 57ki**, the best recessive PS female for many years, and mate them with their local males.

The brand name of this cross is the "J-Dabaco." It is very well-known in terms of quality, good growth rate, low FCR and a great meat texture. In the future this new farm will be used for the Hubbard JA57ki PS females and their local males and also for their layer breeders which happens to be the NOVOgen Brown.

Hubbard is very pleased to see this good development and wish Dabaco every success in the future.

SRI LANKA: PUSSALLA'S UPSTREAM INVESTMENT THROUGH ITS OWN GRAND PARENT FARM

Pussalla Poultry Processors owned by the Dewita family and long-time customers of the **Hubbard F15** Parent Stock decided in 2012/13 to expand their business up to Grand Parent level to make their operation total integrated. At the same time they moved to the Hubbard Classic to take advantage of its combination of excellent breeder performance and competitive broiler growth for the independent market.

Kapil Manwal, Hubbard Technical Manager for Sri Lanka, helped them developing this state-of-the-art Grand Parent facility using a "day-old-to-death" approach. The Grand Parent cages have been supplied by Skylark Hatcheries from India, which also a Grand Parent customer of Hubbard.

The Grand Parent site is in a totally isolated area and of course enjoys Sri Lanka's excellent health status regarding most of the worldwide diseases.



Pussalla commissioned the new Grand Parent farm in 2013, completing their objective for a total integration of the production chain, starting from supplying day-old Parent Stock chicks to their own parent farms up to marketing of meat products at company owned outlets. The project is situated on a 3 hectares (8 acres) plot in Bulathsinghala and consists of 3 state-of-the-art poultry houses. Each house is equipped with sophisticated ventilation, feeding and drinking systems imported from Thailand and Belgium. The houses are also equipped with systems for artificial insemination.

Pussalla's facilities have been audited by Hubbard's Quality department and are marked as "top notch." It is now being considered for export of Parent Stock to surrounding countries after passing Hubbard's strict Quality control procedures and transport requirements. The sanitary control plan is totally in line with Hubbard's control plan, including a very strict survey on salmonella.

EMEA



FINLAND: EAGERLY WAITING FOR FIRST HUBBARD H1 BROILERS IN THE FIELD

The Finnish broiler industry is eagerly waiting to get the first **Hubbard H1** broilers in the field. Suomen Broiler Oy, the newly appointed Hubbard GP distributor for the Nordic region, delivered the first Hubbard H1 Parent Stock to their customers as from end of 2013/early 2014. It will only be by the last quarter of 2014 that the first broiler flocks will have been processed and the initial field results can be evaluated.

Vesa Jokela, Director of Suomen Broiler, confirms. "So far the rearing of the Hubbard H1 PS has gone well and the future breeding flocks look very promising."



Also the Grand Parents are producing well and show the genetic potential of the breed. Suomen Broiler has very good confidence that the Hubbard H1 broiler will meet the demand of the Finnish broiler industry.

The Hubbard H1 broiler is well-known for its dry litter and very low level of footpad lesions combined with an efficient growth and high breast meat yield. Research done at the University of Helsinki indicates that the quality of the breast meat of the Hubbard H1 is also very good, with more but thinner fibres than the product currently available in the field.



"We have been working very closely with the Finnish industry for more than 40 years and we are able to meet all specific requirements with the GP flocks placed on our farms in Finland. We have been and are producing at the highest level of biosecurity and quality."

A group of Finnish broiler growers united in the Satarehu feed mill recently visited Hubbard in France to learn more about Hubbard and the French broiler industry. They took the opportunity to exchange experiences about broiler growing with the Hubbard technical team and visited one of the feed mills of Le Gouessant in Bretagne and saw the specific production of the slow growing Label Rouge broilers (minimum 81-day free range) for the high quality market in France.



They all enjoyed their trip to France and are now looking even more forward to getting the Hubbard H1 broiler on their farms.

TURKEY: KESKINOGLU WELCOMES RUSSIAN AND KAZAKH DELEGATION TO TURKEY TO EXCHANGE HUBBARD F15 EXPERIENCE

Turkey/CIS – Baltisa and Hubbard organised a technical visit for a Russian and Kazakhstan delegation to the Keskinoglu company in Turkey to share the positive experiences of the **Hubbard F15** used successfully by their companies.

"Keskinoğlu Tavukçuluk ve Damızlık İşl. San Tic. A.Ş." is a family-owned company based near Akhisar in the western part of Turkey.

The company has a rich history in poultry business which started in 1963 with only 30 layer chicks. Nowadays they are one of the leading broiler meat and table egg producers, and the first Turkish company allowed exporting to the EU. Keskinoglu currently processes nearly 100 million broilers (230,000 tonnes of meat) per year. Besides the poultry business they have also developed over the years other businesses like: olive oil production, animal feed production, organic fertilizers, cardboard packaging, logistics, their own "Tavuk" restaurant chain and medical products. Keskinoglu also highly contributes to development of its region and the country by several major contributions on every level of education.



Hubbard F15, a great success for Keskinoglu

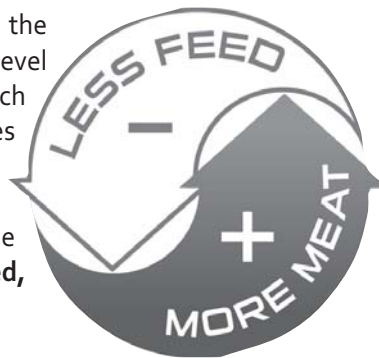
In 2010 the company placed the first Hubbard F15 breeder flocks and by now the Hubbard F15 represents more than 60% of their total volume. Even in hot climate conditions and a stocking density of 8.4 females per m² the Hubbard F15 female produces according to the breed standard. The increased stocking density on breeder level in comparison with a standard breed delivers 25% more day-old-chicks per m² with 30g less feed/chick produced due to the "Feedsaver" concept of the Hubbard F15, leading to the lowest cost of production per day-old-chick. On broiler level the lower FCR allows to save up to 100g of feed per each kg of live weight (10 points of FCR). All these advantages together with a significant better liveability, excellent growth and a higher level of A-quality carcasses made Keskinoglu to decide to work more and more with the Hubbard F15 which are supported by the **"Less Feed, More Meat"** campaign of Hubbard.



Russian and Kazakh delegation

The Russian and Kazakh delegation, here in front of some of the broiler breeder houses of the Keskinoglu company, consisted of major players within the Russian and Kazakh poultry industry. Representatives from Siberia, Ural, the "Far East" and Almaty attended the visit and extensively exchanged on management and technical aspects with their counterparts at Keskinoglu. Even though different environmental conditions often involve specific management practices, they all agreed that the Hubbard F15 was the best answer on nowadays increased costs of production.

The tour has been very fruitful for all companies involved and the delegation went back to their home countries with a lot of new information and knowledge gained to get the best results out of the Hubbard F15.



3

Hubbard IN THE NEWS

Feeding the world by matching genetics to market requirements

Feeding the world today and in the future in a sustainable way

The world population is currently growing at a frightening level of 220,000 persons per day (or 80 million per year). Asia and Africa are the regions likely to experience the fastest growth. We can also see a transition from a staple diet of cereals and vegetables in developing countries to a diet based on further processed foods consumed by families in some of the most developed economies resulting in much higher food expenditure by family per week.

Some may be looking for a return to organic farming methods to feed the growing world population, but to our opinion this just answers a specific demand for a niche market and will not be the answer to feed a growing human population sustainably.

Broiler breeder company Hubbard is part of Groupe Grimaud, a French family owned company focusing on further development of its worldwide leadership position in its core businesses: animal genetics, bio-pharmacy serving human and animal health.

Groupe Grimaud developed its own "Natural Concept" aiming for a sustainable poultry production around the world. The 5 key points of this concept are:

- ① favour robustness and feed efficiency traits in all breeding programmes,
- ② better prevent infectious risks through bacterial ecology management,
- ③ stimulate the immune system of the animals; natural by

competition, acquired by vaccination,

④ because they are very valuable, use the chemical "super molecules" (antibiotics) only in case of proven pathology,

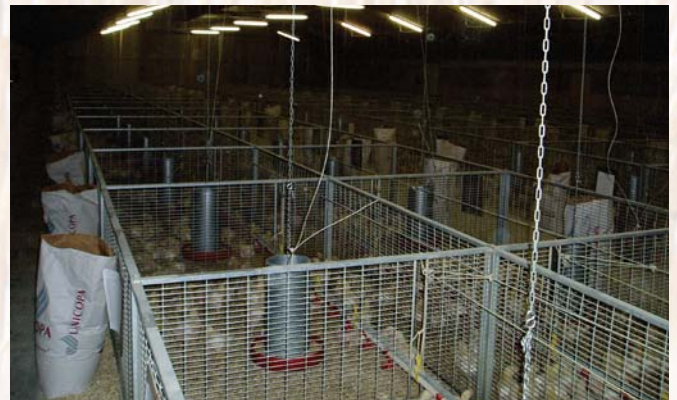
⑤ to give back to the earth the necessary nutrients by the composting of the organic by-products.

By focussing on its core business and initiatives such as "Natural Concept", Groupe Grimaud is trying to help the world to meet feed and health challenges. With its "Natural Concept", Groupe Grimaud practices a unique vision on sustainable breeding and production of animal protein.

The main objective of a primary broiler breeder

Within Hubbard, as a primary broiler breeder, it is our main objective to continue to improve the efficiency and profitability of the broiler industry which is challenged by more and more difficult and complex circumstances; the strong increase in cost of raw materials, on-going disease challenges around the world, increased pressure on animal welfare and use of antibiotics and uncertainties about market developments in some regions/countries.

At Hubbard, we sincerely believe that this industry will continue to grow in the coming years. It is our responsibility to help the industry to provide all the elements for its future growth. Genetic selection is by definition actively involved in the development to produce more with fewer



resources, making the broilers more efficient to produce meat (for instance in a selection farm like in the above picture). Selection for the best feed efficiency has been general practice within Hubbard for many years, which is proven by the actual performance of our products, being recognised as, or among, the most efficient products in the field.

Therefore Hubbard launched during VIV ASIA 2013 its new corporate campaign "**Less Feed, More Meat**" perfectly illustrating its main target: to propose a wide product range



adapted to different market needs, with a feed conversion rate which continuously keeps improving combined with the highest total meat yield.

Selecting for feed efficiency has the final aim to improve the profitability of the broiler industry, but also targets a more sustainable future. Groupe Grimaud and its subsidiaries are proactively embracing this new challenge to make the poultry industry more sustainable over time, to be able to continue to feed the growing world population. At Hubbard we actively contribute to this objective by producing more meat with less feed, but on top we are also actively working on the hardiness and robustness of the products we offer.

Matching market requirements and R&D

Continuously upgrading breeding programs in order to match markets requirement is the main goal of the R&D-team of a primary breeding company. One of the biggest challenges that geneticists are facing is running breeding programs where the Elite level pure lines flocks are kept under top conditions (in order to maximise the expression of the genetic potential as well as guaranteeing a disease free status) and, at the same time, breeding for robustness and the ability to perform under a variety of environments.

This difficult equation is solved within Hubbard by:

- ① breeding the pure lines in a highly bio-secure environment,
- ② placing pedigree sib-tests in challenging commercial conditions, these chicks being relatives of selection candidates.



In both types of facilities all pedigree chicks are grown as broilers. The pedigree sib-tests are operated in Europe (temperate climate conditions) in R&D farms like above, and in South-East Asia (hot and humid conditions). All the information recorded on an individual basis is integrated into the pure lines genetic index evaluation. Evaluating genetic potential under challenging commercial conditions is especially important for robustness and welfare traits such as liveability, lower frequency of leg disorders (twisted legs, tibial dyschondroplasia), hock burn and foot pad lesions.

To match markets requirements, geneticists also have to include many breeding objectives in the pure line programs. One of the most important objectives is Feed Conversion

Rate

(FCR). Since the early 80's, Hubbard has been delivering to the industry significant gains in FCR.

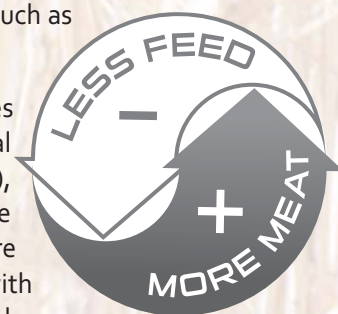
Besides the conventional way of selection for FCR (i.e. by using individual cages), RFID (Radio Frequency Identification) technology allows measuring "whole life FCR" of individual birds kept in group pens on the floor, much closer to field conditions. This technology also gives access to feeding behaviour traits (meals/day, meal size, etc...).

Robustness and welfare traits are also given a very high priority. A variety of traits is measured in the multiple environments design (pure line facilities plus challenging commercial conditions sib-testing): leg defects (valgus, varus and rotated tibia), tibial dyschondroplasia, foot pad lesions and hock burn. Mortality is recorded by cause of death (ascites, flip-over, runting, etc.). Blood oxygen saturation, a trait related to resistance to ascites, is also recorded on all selection candidate males. All these data are analysed with state-of-the-art statistical methods allowing identifying the individuals showing the best genetic potential for robustness and welfare traits in different environments.

"Less Feed, More Meat" means also breeding for better breast, legs and total meat yields. To achieve this goal selection candidates are evaluated for breast yield by using a conformation score (subjective scoring assessing breast length, width, shape) and ultrasound technology. Total meat yield is evaluated by processing and deboning samples of the sibs. Hubbard geneticists are also collaborating with research institutes to investigate the potential of meat quality criteria such as meat pH.

Having presented R&D strategies related to broiler commercial performance (live, processing), broiler robustness and welfare performance, the "Less feed, more meat" target is also achieved with breeder performance. Egg numbers, egg weight, egg shell quality, percentage of hatch are key traits in the female lines breeding programs. In the male lines the focus is more on fertility measured under natural mating conditions.

By maintaining a close contact with the different broiler markets, customers, breeding objectives will keep on being upgraded to match broiler industry future needs. With its multi-species genetic teams, being part of Groupe Grimaud, gives access to expertise on state-of-the-art breeding tools such as genomics, statistical methods and RFID technology.



AMERICAS



TRANSPORTATION GROWTH - HUBBARD LLC

Jay Daniels, Director of Operations at Hubbard LLC in the USA, gives an overview on the importance of the transportation department for Hubbard's business and the growth in its activity seen over the last few years.



Due to the robust market demand for the **Hubbard M99** breeder male in the United States, Hubbard LLC has increased its number of weekly chick deliveries three-fold since 2008. This steady expansion has led to an overhaul of Hubbard LLC's transportation department.

The transformation process was guided by three clear objectives:

- ① provide excellent customer service by making on-time deliveries,
- ② maximise chick quality through the proper use of our special designed transport vehicles,
- ③ and maximise efficiencies through load management and preventative maintenance.

Today, Hubbard LLC's fleet consists of over 20 vehicles and more than 20 drivers primarily based in Tennessee. Hubbard also maintain operations in North Carolina and Arkansas. The Arkansas distribution warehouse can deliver up to four orders in one truck, and then disperse the individual orders into four separate delivery vehicles to reach our customers located west of the Mississippi River.

In North Carolina, as in Tennessee, Hubbard's transportation department picks up eggs produced from contract laying farms and safely transports them to the local egg depot. The egg collection department organises a weekly trip to



New Hampshire for Foundation and/or GGP hatching eggs and two trips per week to our North Carolina egg depot to pick up GGP and GP hatching eggs. Led by the supervisory tandem of James Shockley (chick delivery) and Bob Sapp (egg collection) the twenty commercially licensed professional drivers are the heartbeat of the operation. These dedicated professionals work through the night to ensure on-time deliveries. They make deliveries as far away as Canada, the border of Mexico, the southern tip of Florida and the middle of California. Deliveries can be an hour or up to thirty six hours away depending on the customer's location.

In January 2009, Hubbard LLC partnered with Ryder Transportation and Smithway (chick transport manufacturer) who helped to develop preventative maintenance schedules. Ryder has now established on-site inspection and maintenance facilities at our Pikeville, TN hatchery. Their on-site certified mechanics complete our preventative maintenance and repairs. For our Smithway boxes alone, they've developed a 29 point inspection process which is completed every 60 days. This program is aided by a DVCR (driver vehicle condition report) which is completed by the drivers after each and every trip.

As Hubbard LLC builds its fleet, we wanted to improve our maintenance program by simplifying the number of vehicle manufacturers. Today we utilize three types of Freightliner equipment optimising the efficiency of the fleet. Whether it's a trailer that can deliver up to 100,000 chicks, a truck that can hold up to 30,000 chicks or a Sprinter van for the smaller breeder male deliveries less than 4,000 chicks. Smithway Inc. designs and builds the ventilation/power systems for optimum chick comfort. Each of our Smithway units is equipped with redundant power generators - each capable of powering the full load in case the other unit fails. These types of safeguards, carefully designed patents and regular training events for both drivers and mechanics have helped Smithway remain the industry standard for chick transportation vehicles in the United States.



If chicks are chilled or overheated, the excess energy used to maintain body temperature limits the energy they can use for growth and health. One of Hubbard's transportation department's primary roles is to limit temperature stresses which can lead to reduced chick quality. Optimal fan speeds are determined based upon a variety of factors including truck size and quantity of

pressure fans. For each of the delivery vehicles the optimal settings in order to maintain internal chick temperatures between 103-104°F / 39.4-40°C have been identified. The investment in climate-controlled delivery units helps to ensure our customers receive consistently healthy, robust chicks even in the most adverse weather conditions.

There's a saying I have adopted from our United States Marine trained hatchery manager Tony Britt—we must "inspect what we expect." On each and every trip leaving our facility, a temperature recorder records temperature our eggs or chicks are exposed to. This information is used to ensure our products were not exposed to temperatures over or below our preset parameters. As we move forward with wireless technology we are working with Smithway and Dirt Road Data technologies to have trip reports sent immediately after unloading. Not only will we see our temperature recording graphs but a full diagnostic including generator voltage, conditioned air discharge temperatures, high & low compressor psi and blower amperage to name a few.

Preventing the spread of disease will always be forefront in our program. Key components of our bio-security program include wearing protective clothing while off-loading at our customer's farm, an off-site plastic box washing/truck disinfection facility and our truck sanitation program. Each and every vehicle is cleaned and disinfected upon return to our truck wash building. Drivers arriving back sometimes late at night or early in the morning know their delivery vehicle must be thoroughly sanitised before they go home.

From working late into the night, to following commercial driving laws regulated by the United States Department of Transportation (DOT), representing a professional image to our customers, ensuring baby chicks are not stressed during transportation to following the bio-security protocol and for their flexibility with our ever changing delivery schedule—we salute our team of professional drivers. Without them, this successful increase to our weekly delivery volumes could not have been achieved.

EMEA



THREE BROILER MANAGEMENT SEMINARS IN ALGERIA

January 16th in Tizi Ouzou, January 18th at Constantine and January 20th 2014 in Oran: in total more than 300 people attended the meetings Hubbard dedicated to the broiler management in Algeria .

The Algerian poultry industry undergoes a severe

economic crisis with feed costs representing more than 70% of the live broiler cost.

After the introduction made by Dr. Najib Tekfa, Manager of Hubbard Algeria, Jean-François Hamon (Hubbard SAS) insisted during the first part of the seminar on the actual breakdown of the production cost of a kg of chicken in Algeria, and explained why obtaining the lowest cost price is associated with the best live performance (FCR, liveability, etc...) combined with a higher productivity (kg per m² per year).



In the second part of the seminar Toudic Claude, Technical Broiler Specialist at Hubbard SAS, reviewed all technical parameters that influence broiler performance. From chick quality, quality of the starting period, equipment, temperature, ventilation, concentration but also the presentation of the feed, the quality of buildings to the important role of the farmer as a corner stone to optimise every detail to get the best technical and economic result in the field.



Increased broiler consumption in Algeria passes through the supply of the Algerian consumer with a broiler meeting their expectations on quality and of course cost.

FRANCE: A NEW CONTRACT REARING FARM BREEDER WITH NEW INVESTMENTS

After several years of rearing turkey breeders, Mr. and Mrs. Thierry Haméon joined Hubbard early 2014. Prior to the first placement in March, it was necessary to rethink the management of the 4 buildings with a total surface of 5 000 m². The problem for the new contract farmers was to minimise the workload during the empty period between rearing cycles. It was after seeing the Spinfeeder-system in Hubbard's facility "St. Gildas" that they made the choice for this type of feeding equipment. A major renovation of the buildings and a total redesign of the equipment were soon undertaken.

Each house is equipped with five Spinfeeders and partitions of two meters height separate each Spinfeeder, creating pens of 15m x 15m. Water is provided by using 4 lines of nipple drinkers with start-up cups. For the brooding period two lines of radiant heaters are used. The starter diet is made



available for the chicks on three lines of chickpaper of 1m wide, covering 50% of the surface during brooding. Complementary chick fonts were placed to allow easy access to water during the start. The transition from manual

feed distribution on the chick paper to the distribution of feed on the litter with the automatic Spinfeeders started at the 12th day with a gradual transition of one week.

This type of feed distribution has significant advantages especially in terms of workload during the cleanout period and also in terms of ease of preparing the chicken house for the next cycle. However, our experience and that of Mr Haméon also shows that the quality of the feed pellets is a major factor in the success of the process.

4

Recent changes in the HUBBARD Team

PATRICK NICHOLLS joined Hubbard U.K. Team



Patrick Nicholls has joined the Hubbard UK team as Poultry Technician end of 2013. He will be responsible for technical services to the customers in the UK and Ireland and will also be looking after the Hubbard production facilities in the UK. Patrick, replacing Nick Lynn who left the company earlier in 2013, brings a wealth of experience to Hubbard UK. Most recently he has been the Agricultural Manager of Highbury Poultry Farm Products Ltd, being responsible for their broiler growing operations. Prior to this, Patrick was Breeder Farms Manager for an independent flock farmer, Parent Stock Manager at Humberside for Premier Poultry (now PD Hook), and Broiler Area Manager for Grampian Country Chickens (now 2Agriculture). Patrick received a Higher National Diploma in Agriculture at Askam Bryan, York.

He is based in Shropshire and reports to Jim Hunnable, Area Business Development Manager.

HUBBARD LLC: Sean Holcombe has been promoted to the newly created position of Director of Sales & Technical Service in North America & Canada. He will continue to report to Mark Barnes. Josh Cox, previously Technical Service Representative for the South-eastern region now becomes Technical Service Manager for the USA & Canada.



SEAN HOLCOMBE: New Sales & Technical Service Director for North America & Canada.

Sean Holcombe has spent 10 years at Hubbard following an additional 10 years with another primary breeder & integrator in Arkansas. His success with Hubbard products has earned him this opportunity.

The US sales team will report to him, and Sean reports to Mark Barnes, Hubbard LLC CEO.



JOSH COX: Technical Service Manager in USA & Canada

Josh Cox has been a tremendous asset to Hubbard LLC since he joined them 3 years ago. He will continue to report to Sean Holcombe. Also, reporting to Josh Cox are Steve Crosson for the Western region and Billy Tyson for the South-eastern region.

Billy Tyson for the South-eastern region.



AMANDINE CANIN: R&D Project Manager

Amandine is 25 years old and specialised in Animal Science. Before joining Hubbard, Amandine did her internship with a feed company where she was in charge of several studies related to broilers and turkeys. Based in Chateaubourg, in France, Amandine

will be, under the responsibility of Yves Jego R&D Director, in charge of several specific R&D projects.

GARY MILLAR: International Business Development Manager for the Asian markets



Originally from Northern Ireland, Gary graduated from Greenmount College of Agriculture, Antrim with a Higher National Diploma in Agriculture. He completed his studies at the University of Edinburgh with a Master Degree in Business Administration as well as a BSc (Hons) in Agricultural Economics from the University of Aberdeen. Gary comes to Hubbard with over 15 years of experience working in the poultry breeding business in a number of countries in Asia, India and Australia in particular, and comes with an extensive experience in project development, design, managing production teams and has been involved at Great Grand Parent as well as Grand Parent stock level.

Gary works out of Australia and reports directly to David Fyfe, Hubbard Business Director for Asia.

AMERICAS

HUBBARD LLC

195 Main Street - P.O. Box 145 -
Walpole NH 03608 - U.S.A.

TEL. +1-603.756.3311 - FAX +1-603.756.9034
contact.americas@hubbardbreeders.com

E.M.E.A. / BRAZIL

HUBBARD S.A.S.

Le Foeil - P.O. Box 169 - 22800 Quintin - FRANCE

TEL. +33 (0)2.96.79.63.70

FAX +33 (0)2.96.74.04.71

contact.emea@hubbardbreeders.com

ASIA

HUBBARD S.A.S.

Le Foeil - P.O. Box 169 - 22800 Quintin - FRANCE

TEL. +33 (0)2.96.79.63.70

FAX +33 (0)2.96.74.04.71

contact.asia@hubbardbreeders.com