



May 2011

# Calendar

#### 25-26 May

European CTF Research, Bavaria, DE

Europe

### 9 June

Taking Precision Agriculture to New Heights, Oxfordshire, UK

#### June

CTF in Grass Production, Farm Visit, Nørager, DK

**30. June 1. July** MinTill and CTF farm visits, South Sweden

#### **21 June** CTF Discussion & Farm Visit Oxfordshire, UK

# July

Demonstration of 12 m harvester fronts and stubble management, Bregentved, DK

#### 25-29 September

World Congress of Conservation Agriculture, Brisbane, Australia.

# November

RTK-GPS auto steering seminar, Foulum, DK

More info: www.ctfeurope.eu

Newsletters are available in English and Danish,

Layout: AgroTech

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# 9 and 36 m - an emerging standard for European CTF farmers?

Hans Henrik Pedersen, DK

In our last newsletter we featured two large farms operating CTF with 12 m for drilling and cultivation and 36 m for plant care. The two farmers featured in this newsletter have both chosen a system based on 9 and 36 m working widths. Many farmers already have harvesters with 30 foot (9.14 m) fronts while 9 m drills, although unusual, are more affordable than 12 m machines that need a large area to justify. As a step toward a fully matching system we are working with members who wish to use their 6 m cultivators and drills alongside 9 m harvesters. By careful planning of workingand track widths, we can reduce tracking to around 35%. Let us know about your plans and machinery so we can do this planning and calculation for you.

# 9 m arable CTF system in the UK

Tim Chamen, UK

Lincolnshire farmer and contractor Matthew Neesham converted to CTF in 2010 along with Andrew Scoley, who between them farm 1,133 ha on heavy to very light soils. Andrew plans to integrate sugar beet into his CTF system as well. Their present no-till crop establishment is with a 9 m Dale Eco-drill matched with a 9.14 m cutting platform on their John Deere s690i combine and 36 m self propelled sprayer. Track width of the combine is 2.8 m while tractors and sprayer work on 2.5 m, the tractors having short extensions in the front axles. Grain trailers are presently on 2 m and changing this to 2.5 m is a challenge. They have considered hydraulic extensions but this would be expensive. This system will feature as our next Case Study available to Members.

# 9 m arable farmer in Southern Sweden

Hans Henrik Pedersen, DK

Manager Josef Appell converted to CTF in 2010 on 1,000 ha at Gaardstanga Nygaard. Drilling is with a 9 m Väderstad Spirit, that has been modified with tines for fertilizer injection at 25 or 50 cm centres. It will also be used for strip tillage in sugar beet. It is planned to convert the farm to no-till which besides grain and OSR, grows 200 ha of sugar beet and 50 ha of grass for seed. Sugar beet will be harvested traditionally using a selfpropelled harvester not restricted to the CTF tracks. Josef Appell expects CTF will improve soil structure, boost yield as well as reduce fuel consumption from 60 I/ha to approximately 35 I/ha. A MinTill study tour in late June includes a visit to Gaardstanga Nygaard. See www.ctfeurope.dk for details.



Drilling spring Barley at Gaardstanga Nygaard with their new Väderstad Spirit drill and Väderstad Rexus roller.



Entry into a CTF system with wheat harvest at Neesham Farms.



Direct sowing oilseed rape on 27 August 2010 at Neesham Farms.

# CTF in grass is possible without GPS

Hans Henrik Pedersen, DK

Organic farmer Brian Roed in Central Jutland DK has grown his grass fields with CTF for four years. Raking and harvesting with a self loading wagon is done at 12 m while mowing is at 8 m. He has created unseeded tramlines at 24 m which enable him to drive accurately without GPS. Slurry has been distributed with hoses at 24 m. Due to Danish legislation slurry will in future be injected at 12 m. Without auto steering mistakes in driving happen and these unintended tracks are very visible in the field. So Brian has now invested in a John Deere steering system to improve accuracy. We will visit his farm in June. See www.ctfeurope.dk for details.



Raking grass for 12 m harvest at farm of Brian Roed.

# Development of a Wide Span machine for farming and harvest

Jens Kristian Kjeldahl, farmer, Samsø, DK

After 4 years of farming on 3.2 m beds I have seen many benefits of CTF and minimum tillage. But I have also experienced the limitations of traditional tractors. And for many crops we still lack harvest machines that match 3 m beds. The Danish Business Innovation Fund has granted support for production of a Wide Span Machine that will be produced by ASA-Lift. On our farm we will demonstrate that onions can be grown and harvested solely by use of the Wide Span machine running over 9.6 m beds. In near future we hope to grow all crops on wide beds.

Aarhus University is involved in the machine specification. Farmers are sought to help with the specification. If you are interested in Wide Span you can contact CTF Europe partner Hans Henrik Pedersen, who is now employed at the University or Tim Chamen who is experienced with wide span farming.

# Real time measuring of spatial pH variation

Christoph Bommes, DE

Jointly with Fachhochschule Osnabrück, we have tested a Veris pH sampler, a tractor driven machine that continuously takes soil samples and measures pH of the soil. Conventional soil sampling and analysis is costly, and allows only a poor estimation of the spatial distribution of this important soil parameter. With detailed pH maps, farmers and contractors can precisely apply soil amendments such as limestone. Variable rate seeding is also possible. The Veris machine also measures electronic conductivity of the soil which is related to the texture, water content and salinity of the soil.

We consider the Veris pH sampler a valuable tool to optimize plant production.



pH distribution map that has been used to vary limestone application.

In the field the Wide Span machine will leave only one track for each 9.6 m. When in transport position, the aim is to be within the dimensions defined by traffic regulations. Drawing: ASA-Lift A/S

# Partners in CTF Europe

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All partners are helpful in basic CTF agronomy and technology.

