



A Good Harvest

Safely Gathered In

Inside this issue:

<i>Safely Gathered In</i>	1
<i>Some Unexpected Results</i>	1
<i>Environmental Surveys</i>	2
<i>Working with Bees</i>	2
<i>Latest Andalusian Pullets</i>	2
<i>Biological Monitoring</i>	3
<i>Genetically Modified Maize</i>	3
<i>The New Goose Pond</i>	3
<i>Managing for Biodiversity</i>	4

Some unexpected changes in the weather resulted in some losses, two-thirds of the squash harvest, and some gains, the best range of winter vegetables ever.

By the end of the summer season, we had dried, bottled, jammed, chutneyed, pickled and fermented a third more produce than last year.

In the space of seven years we have gone from zero to eighty percent self-sufficiency in food.

The extended warm weather also enabled us to ripen chilies for the first time and to save enough seed from aubergines and peppers for next year's planting.



Some Unexpected Results



The warrenry began with two breed lines of New Zealand Whites. However, there are no distinguishing characteristics between male and female. This has meant that we have to pick them up individually to determine the sex and use a coloured marker to identify them.

A thought that the introduction of another breed colour might pro-

duce unique colour differentiation had us visiting Guadix market. There we bought three black rabbits—about eight weeks old.

They were kept in a quarantined area, during which time the doe gave birth to ten young. Surprisingly, there were four white, two grey and four black.

Although it has been valuable introducing another blood line, our expectation that this would produce unique colour differentiation has not been met!



Detailed information about the management of the warrenry will be part of the website membership Library which will be on-line in January 2007.



Special points of interest:

- Wax moth impact on bee colonies
- Suitability of geese in brittle landscape management
- Questioning managing for bio-diversity

Environmental Surveys



As part of a support system for English residents who have recently moved to this area, we have expanded our Environmental Survey content.

Included in the survey are cultivated and wild plant inventories, soil condition tests, detailed commentary and photos, all of which are presented in a written report.

The health of the ecosystem processes is the basis for all success. With this premise as a

foundation, we conduct an on-site survey to determine how well these processes are functioning on each piece of land.

This enables owners to manage their land sustainably, ensuring that their financial investment also becomes an environmental investment.

www.bolisticdecisions.com/sb_envsurvey.html



Working with Bees

Wax moth is never a problem in a healthy hive



One of the difficulties that David has faced in establishing a bee colony is that, the English hives he inherited from a retired bee-keeper are not the same dimensions as the Spanish.

Local apiarist, José, gave David a Spanish frame with a queen and

David set about making the necessary adjustments to the frames.

During the first year, he introduced English frames with new wax foundation, but the bees would not move onto the new frames, preferring to create their own wax foundation underneath the frames. This made it impossible to harvest the honey without damaging the combs.

Although two new English hives were established by capitalising on the arrival of wild swarms, this first Anglo-Spanish hive never thrived.

This year, when David inspected the hive, it had been decimated by wax moth. He learnt from another beekeeper that wax moth is never a problem in a healthy hive. The bees kill them. However, if the health of the hive is compromised, then the moth will take over.



Latest Andalucian Pullets



After the hiatus earlier in the year, an Andalucian hen went broody late summer and successfully reared five young.

Once again there was the range of colouring: two white, one grey, one black and one grey and black.

The proportion of males to females was high, which is charac-

teristic of poultry. In this case only one of the new brood was female.

The colouring does not provide for autosexing, as in some other breeds. It is only after a month that it is possible to identify the sexes as the males have more developed combs.

More detailed information on our

poultry management will



Biological Monitoring



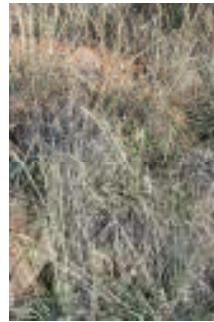
This is the second year of monitoring the impact that our management of the sheep has been having on the health of the ecosystem processes.

Part of the monitoring process involves assessing the health of the existing perennial grasses and whether or not that population is increasing.

After the first rain, it was very

obvious that the grass that had been grazed was in markedly better health than that which had not. The ungrazed material of previous years had been cleared, leaving room for new green growth.

By contrast, the ungrazed areas showed little new grass, with an abundance of oxidizing decadent plant material, which if left would eventually result in the grass being suffocated, and a reduction in nutritious feed for



the sheep.

It was also interesting to note the effect of over-resting of grass in previous years, which was very marked now that there was new growth. The centre of the perennial grass had died out, suffocated by un-eaten decadent material, leaving only the periphery alive.

Those areas where the perennial grasses had died out, to be succeeded by short-lived woody perennials showed markedly more bare soil.



Genetically Modified (GM) Maize

We are not self-sufficient in animal feed, and have bought in grains to supplement what we are currently growing.

With our increasing concern about the introduction of GM maize, we have made a policy decision to no longer buy in this feed.

We have also made a commitment to move more rapidly towards generating our own animal



grains. One that does particularly well here is sorghum, and the variety that we have grown is Rox Orange. The stems can be eaten like sugar cane, the leaves, stems and seed heads provide forage for both sheep and rabbits. The chickens will also eat the seed heads. With additional watering after the seeds and stems have been harvested, the sorghum will re-sprout providing a second harvest.

With our increasing concern about GM maize we have made a policy decision to no longer buy in this feed

The New Goose Pond

When we decided to trial geese in this environment, we built a temporary pond with a plastic liner. However, this liner has regularly leaked leaving the geese without water for periods of time.

Whereas this is not crucial for their health, we have discovered that the Production Tou-

louse, contrary to most breeder information, need a pond for mating purposes.

The first year they had continuous access to water, resulting in fertilised eggs, but no young. The second year with intermittent access to water, there were no fertilised eggs.

So this year we skimmed the plastic liner with concrete in order to see whether in their third year they are able to rear their own young.

Although they have a role in grazing, their possible inability to rear their own young, may mean they are not be suitable for this environment.



Semilla Besada Companions *shaping the future*

Aspen, David and Samuel Edge
Apto. de Correos 19
18420 Lanjarón
Granada
Spain

Phone: (0034) 958 347 053
Fax: (0034) 958 347 117
E-mail: semillabesada@holisticdecisions.com

We're on the Web!

www.holisticdecisions.com/semillabesada

News Flash

The Gardeners of Eden by Dan Daggett is now available in the Book Shop. An inspirational look at how farmers and ranchers are using grazing animals to regenerate brittle landscapes, with greater success than conservationists.

www.holisticdecisions.com/booksshop.html

Semilla Besada is a 16 hectare research conservation farm set in the foothills of the Sierra Nevada mountains in southern Spain.



The focus of the farm is the improvement of this ecosystem's capacity to cycle water and nutrients, support complex and stable biodiversity and provide year-round cover for bare soil. Attendant to this is the development of sustainable land and livelihood practices for small-scale farmers.

Every decision we make is :

- *Tested for environmental, social and environmental sustainability.*
- *Assumed to be wrong.*
- *Carefully monitored to ensure that we can take remedial action as soon as we detect a deviation from long-term sustainability.*

Managing for Biodiversity

Increasing biodiversity is now unquestioningly taken as being an important land management goal. However, our experience at Semilla Besada has raised some interesting questions.

In our initial attempt to establish our bio-diverse perennial plant structure, we were involved in clearing grass and digging soil. The following year saw an unprecedented variety of annual wild plants. The third year saw a drop in that variety as we did not disturb the soil, and the fourth year with the re-establishment of a grassland the biodiversity fell yet again.



It was then that we realised that bio-diversity is not necessarily an indicator of overall ecosystem health.

The variety of annual wildflowers were those associated with regularly disturbed ground. So would regularly ploughing or digging the land in order to maintain this diversity be synonymous with moving Semilla Besada to increased ecosystem health?

Would the establishment of perennial grass, with the attendant loss of biodiversity in terms of these tillage-dependant annuals, but providing year-round ground cover, stabilising deep roots

and green growth for over half the year, provide for better ecosystem health?

Details of our agro-forestry experiment will be in the website Library.

