

## Using health plans on organic farms I: lowland cattle and sheep

**Case study:** Ruth and Malcolm Watkins, Ty Du Farm, Llanarth, Raglan  
Organic lowland cattle and sheep

Ruth and Malcolm Watkins farm Ty Du, a 90 ha lowland sheep and beef holding near Llanarth, Raglan. The Watkinses have been certified organic since 2001. They have 28 pedigree Welsh Black suckler cows and a bull and 160 Texel x Suffolk ewes, 35 replacements, and 5 rams. The sheep flock has been closed for approximately 10 years, and the beef herd is closed now.

### *Health Planning*

The Watkins began health planning in 1999 when they started conversion to organic production – health planning being a compulsory part of certification. They were fortunate at this time to have a local vet practice that was very keen on the concept of health planning. The vet and the Watkins sat down together early in the conversion process to look at the whole farm system and identify where health and welfare improvements might be made on the farm. A template was then developed so that health problems in each of the livestock groups could be addressed in more detail. After identifying a health problem a management strategy was devised to deal with the problem, prevent recurrence and where necessary any treatment required.

### *Trace elements*

Monitoring animal performance was a key part of the health plan introduced during the conversion period and it was during this time that the Watkins noticed lambs were not thriving as well as they should post weaning. In addition, shortly after becoming fully organic in 2001, the Watkins began selling their lambs via a different route and received information back from the buyer on dead weight and carcass grades. By looking at the data they received, the fact that their lambs were not doing well after weaning and that there were increasingly high numbers of still born calves (approximately 17% stillborn in 2001) they realised that a significant problem had developed on the farm and asked their vet to investigate.

Their vet suspected that trace element deficiencies might be a problem and this may have arisen when mineral fertiliser application ceased during the conversion period. On his advice the Watkins tested their livestock, forage and soil for trace element status and Zinc, Copper, Cobalt, Selenium and Iodine were all found to be deficient. A plan to manage the problem was then devised with the vet. Being an organic farm it was not acceptable in the long term to simply supplement the animals with trace elements; rather a broader approach to prevent the problem occurring in the future was required. Due to the health and welfare implications associated with trace element deficiencies, the Watkins were given permission from their organic certification body to supplement their livestock with trace elements, which they did immediately. Shortly thereafter the whole farm had

trace elements applied based on the soil test results and an annual fodder testing and 4 yearly soil testing strategy were implemented to monitor trace element levels. A longer term strategy of renovating pastures and aerating soils to increase trace element availability was also developed, though this is restricted to cultivatable areas with the rest of the farm remaining in permanent pasture.

Following the trace element supplementation, growth rates, finishing dates and number of still born animals were monitored and a significant improvement was seen in all by the following season. There were no still born calves compared with 5 in the previous year (assuming they were sold at 9 months at a live weight of 270 kg, at £1.25/kg live weight (Organic Farm Management Handbook, 2001)) that was a financial loss of £1,330 to the Watkins) and all 170 February born lambs had been finished and sold by September – this is a pattern that has continued since the trace element plan was put in place. Prior to identifying and managing the trace element deficiency 100 lambs were being taken through until after Christmas and were still sold as stores, many of them as late as March or April. This had severe knock on effects in terms of feed availability and feed costs into the next season. The grades of the finished lambs are now consistently above the national average meaning better returns for the Watkins. The cattle are all now finished off grass on which they reach good weights and satisfactory grades.

By identifying and addressing the trace element problem through the use of health planning the Watkins have not only improved their animals health but also the financial performance of the farm through improved growth rates and grades, selling finished animals rather than stores, by reducing feed costs of over wintered animals and by reducing the number of calf deaths.

The Watkins now regularly analyse data on the health and performance of their livestock. They feel that the strategic health planning approach they took with the trace element problem and the great results they achieved has given them the confidence to continue to improve their system, not by making major changes, but rather continually tweaking all aspects of the system to gradually improve the health and quality of the animals they farm. Their health plan has been, and continues to be, an important tool in this process.

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## Defnyddio cynlluniau iechyd ar ffermydd organig I: gwartheg a defaid ar dir isel

**Astudiaeth achos:** Ruth a Malcolm Watkins, Fferm Tŷ Du, Llanarth, Raglan  
Gwartheg a defaid organig ar dir isel

Mae Ruth a Malcolm Watkins yn rhedeg fferm Tŷ Du, sef fferm ddefaid a gwartheg 90 hectar ar dir isel ger Llanarth, Raglan. Mae ganddynt darw a 28 o wartheg magu duon Cymreig, 160 o famogiaid Texel x Suffolk, 35 o anifeiliaid cyfnwid, a phum hwrdd. Bu'r defaid yn gaeedig ers tua 10 mlynedd, ac mae'r gyrr o wartheg biff yn gaeedig erbyn hyn. Fe'u hardystiwyd yn organig ers 2001.

### Cynllunio Iechyd

Dechreuodd y teulu gynllunio iechyd yn 1999 wrth ddechrau trosglwyddo i gynhyrchu organig, oherwydd bod cynllunio iechyd yn rhan orfodol o ardystio organig. Roeddent yn ffodus iawn bod y milfeddygfa leol, ar y pryd, yn gefnogol iawn i'r syniad o gynllunio iechyd. Ar ôl trafod y system ffermio yn ei chrynsyth dangosodd y milfeddyg lle gellid gwneud gwelliannau o safbwynt iechyd a lles. Datblygwyd dull o roi sylw i broblemau iechyd yn fwy manwl yng nghyswllt pob grŵp o anifeiliaid. Ar ôl canfod problem iechyd, dyfeisiwyd strategaeth reoli i ddelio â hi, i'w hatal rhag ailymddangos, ac i roi triniaeth os oedd angen.

### Elfennau hybrin

Roedd monitro perfformiad anifeiliaid yn rhan allweddol o'r cynllun iechyd a gyflwynwyd yn ystod y cyfnod trosglwyddo ac, yn ystod y cyfnod hwn, sylwodd Ruth a Malcolm Watkins nad oedd yr ŵyn yn ffynnu cystal ag y dylasant ar ôl eu diddyfnu. Yn ogystal, yn fuan wedi dod yn gwbl organig yn 2001, dechreuodd y Watkinsiaid werthu eu hŵyn drwy ffordd wahanol, a derbyn gwybodaeth yn ôl gan y prynwr am bwysau marw a safon carcasau. Drwy edrych ar y data a dderbyniwyd, a chanfod nad oedd yr ŵyn yn gwneud yn dda ar ôl cael eu diddyfnu a bod nifer cynyddol o'u lloi yn farw-anedig (oddeutu 17% yn farw-anedig yn 2001), sylweddolasant fod problem sylweddol wedi datblygu ar y fferm, a gofyn i'w milfeddyg ymchwilio i'r mater.

Amheuai'r milfeddyg mai diffyg elfennau hybrin oedd yn gyfrifol, a bod hynny wedi codi, o bosibl, pan roddwyd y gorau i ddefnyddio gwrtaithe mwynol yn ystod y cyfnod trosglwyddo. Ar gyngor y milfeddyg, rhoddodd y Watkinsiaid brawf ar eu da byw, y porthiant a'r pridd i ganfod faint o elfennau hybrin oedd ynddynt, a chanfuwyd eu bod yn brin o Sinc, Copr, Cobalt, Seleniwm ac Iodin. Aethpwyd ati wedyn i greu cynllun i reoli'r broblem gyda'r milfeddyg. Gan ei bod yn fferm organig, nid oedd ychwanegu elfennau hybrin i ymborth yr anifeiliaid yn dderbyniol yn yr hirdymor; yn hytrach, rhaid oedd meddwl sut y gellid atal y broblem rhag codi eto yn y dyfodol. Oherwydd y goblygiadau iechyd a lles sy'n gysylltiedig â diffyg elfennau hybrin, cafodd y Watkinsiaid ganiatâd eu cyrff ardystio organig i ychwanegu elfennau hybrin at ddiat eu hanifeiliaid yn ddi-oed. Yn fuan wedyn, ychwanegwyd

elfennau hybrin i'r fferm gan seilio hynny ar ganlyniadau profion pridd, a chyflwynwyd cynllun profi porthiant blynyddol a strategaeth profi pridd bob 4 mlynedd er mwyn monitro lefelau elfennau hybrin. Ar ben hynny, datblygwyd strategaeth hirdymor o adnewyddu tir pori ac awyru priddoedd i sicrhau bod mwy o elfennau hybrin ar gael.

Ar ôl ychwanegu'r elfennau hybrin, aethpwyd ati i fonitro cyfraddau tyfiant, dyddiadau pesgi a nifer yr anifeiliaid marw-anedig, a gwelwyd gwelliannau sylweddol yng nghyswllt pob un ohonynt erbyn y tymor canlynol. Ni chafwyd yr un llo marw-anedig o'i gymharu â 5 yn y flwyddyn flaenorol (gan ragdybio eu bod wedi eu gwerthu yn 9 mis oed gyda phwysau byw o 270 cilogram am £1.25 y cilogram (*Organic Farm Management Handbook*, 2001)) a olygai colled ariannol o £1,330, ac yr oedd pob un o'r 170 o ŵyn a aned ym mis Chwefror wedi eu pesgi a'u gwerthu erbyn mis Medi – patrwm sydd wedi parhau ers i'r cynllun elfennau hybrin gael ei roi ar waith. Cyn canfod a rheoli'r broblem diffyg elfennau hybrin, roedd 100 o ŵyn yn dal i gael eu pesgi tan ar ôl y Nadolig ac yn dal i gael eu gwerthu fel anifeiliaid stôr, llawer ohonynt cyn hwyred â mis Mawrth neu Ebrill. Câi hyn effaith andwyol ar faint o fwyd a oedd ar gael a chostau porthiant yn y tymor nesaf. Mae graddfeydd ŵyn sydd wedi eu pesgi bellach yn gyson uwch na'r cyfartaledd cenedlaethol, ac mae hynny'n golygu gwell elw. Mae'r gwartheg yn awr yn cael eu pesgi ar wair ac yn magu pwysau da ac yn cyrraedd safonau boddhaol.

Drwy ddarganfod a rhoi sylw i broblem diffyg elfennau hybrin drwy ddefnyddio cynllunio iechyd, mae'r Watkinsiaid wedi llwyddo nid yn unig i wella iechyd eu hanifeiliaid, ond hefyd i wella perfformiad ariannol y fferm. Gwnaethpwyd hynny drwy sicrhau cyfraddau twf a graddfeydd gwell, gwerthu anifeiliaid wedi eu pesgi yn hytrach nac anifeiliaid cadw, a thrwy leihau costau bwydo anifeiliaid dros y gaeaf a nifer y marwolaethau ymhlith lloi.

Mae'r Watkinsiaid, yn awr, yn dadansoddi data ar iechyd a pherfformiad eu da yn rheolaidd. Maent yn teimlo bod y strategaeth cynllunio iechyd a fabwysiadwyd ganddynt i ddelio â diffyg elfennau hybrin, a'r canlyniadau da a gawsant, wedi rhoi hyder iddynt barhau i wella eu system, a hynny nid drwy gyflwyno newidiadau mawr, ond drwy wneud mân newidiadau i bob agwedd o'r system er mwyn graddol wella iechyd ac ansawdd yr anifeiliaid ar eu fferm. Mae eu cynllun iechyd wedi bod, ac yn parhau i fod, yn erfyn pwysig yn y proses hwn.

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