Discussion

Comments on methodology

1. Recording significant plants

A major aim of the survey was to identify and tag significant trees, shrubs and ground layer plants growing in the Field, and record as much information as possible about them. Significance was determined by how well they grew and produced in the low-input, minimal-management regime there. The main limitation to this process was the fact that only those plants that Addy Fern, Phil James or Frank Schuurmans were familiar with could be included. Plants in Eastern Rabbit and the Honeylands were omitted from the survey because no-one now tends or harvests from those areas, and they therefore contain no plants significant to current Penpol participants. Not all significant plants were productive: some, like the Monkey Puzzle trees, are insufficiently mature, others are or have been too shaded, too recently liberated from pots, or lack pollinators; others still are experimental plantings that are of interest but have not borne fruit. Labelling, recording and mapping the plants allows for future management action or research and for the records themselves to be easily updated. The qualitative appraisal of plant health has proved useful in reporting health of areas and of genera, and might helpfully be used to assess comparative yields. In most permaculture gardens, harvests are gathered over time, rather than in one instalment, making the measurement of yields extremely time-consuming. Therefore a qualitative assessment of yield by the harvester(s) seems the only practicable method of assessment in permaculture gardens, although the essentially comparative basis for assessing yields must be carefully elucidated. Unusually poor and wet weather during the survey period (from autumn 2008 to winter 2009), combined with the limited availability of Addy, Phil and Frank tended to restrict possible survey dates. Repeated surveying of significant plants during flowering, fruiting and dormant seasons would yield more detailed information on their productivity, health and potential. Whilst not feasible in this survey, mainly because of time constraints and the number of significant plants at the Field, it could usefully be considered at other sites.

Liz Turner's Scoping Study (Appendix 2a) set out the initial survey methodology, identifying which areas merited detailed attention, which only a limited survey, and which were problematic. The assessment of survey time required for each area has proved remarkably accurate and useful in planning the subsequent work. Surveys of other sites, especially if large, would benefit from a similar study in order to plan the work and predict the investment of time required to gather information. The division of the site into marked out 'transects' was rapidly abandoned because the site was already divided into small enough areas. Only the survey of a site with large areas undefined by hedges or other natural divisions would justify

the effort of hammering in and marking posts, which was particularly difficult in overgrown areas. The label codes, which indicate the design area and compartment of each plant, and are correlated to the mapping numbers, have proved very useful during the analysis of the information. Any labelling method employed on other sites would benefit from incorporating information relating to the plant's location. However, the aluminium tags used to label significant plants, whilst durable, can be almost invisible when the plants are in leaf; anyone wishing to tag trees would be well advised to use equally durable but brightly coloured tags that would remain easily visible.

Prior information/ Record keeping

Those of Ken Fern's maps and notes that were available proved useful, particularly during the survey. Little attempt has been made to assess survival rates from the original plantings, because some maps had become illegible and others were unavailable, but an assessment of survival rates in those areas where the original maps are legible and detailed enough might be possible. The original maps also record the original designs and planting schemes, allowing the documentation of changes that have either occurred or have failed to, whether by default or design. This is paramount in assessing the implementation of the designer's intentions, and in monitoring how, when and why they change.

Ken Fern's "Best plants grown" list, with its updates on the condition of many plants, contains useful notes on many plants, from which some of their history can be extrapolated, but the plants are not easy to locate with any certainty from Ken's area codes. There are now three identifying codes for specimens on the Field: Ken Fern's original ones, the compartment–based tag labels, and the numbers used on the survey maps. The latter two are linked but without several hours' work (comparing old and new Area maps, Bed maps, Hedge lists, and the two plant lists, i.e. Ken Fern's "Best plants grown" and the 'data by species' spreadsheet of Appendix 1) and considerably more involvement from Ken Fern, it is unlikely that many of the original codes can be correlated with the later two. This indispensability highlights the importance of easily understood and updated records for continued effective management, research and the communication of resulting information. Many of the plants and species listed as "doing well" have now disappeared. Like the *Amelanchiers*' response to increasing shade, some plants that throve up to a certain point in the natural succession are no longer able to do so and have declined or died. Some of the Apple trees in the Main Orchard, many of the Currants and nearly all of the Gooseberries have been lost. It may be that bushes of the latter two species survive to feed the birds, small mammals and insects, but they are unlikely to bear prolifically, or even close to their potential, under shade and intense competition from surrounding plants. Even were these plants to be found and cleared around, the information on which cultivars they are will remain lost, limiting any contribution they can

make to the data on their species at the Field. Despite Addy Fern's phenomenal memory, a vast improvement on the information on specimens in the Field would have come from the continued keeping of a journal or diary, in however shorthand a form. Even notes made monthly would have increased the detail and usefulness of available information in assessing how successful various plants had been. The table/list format used by Ken for the "Best plants grown" list may not be optimal for this purpose. The best format for keeping updates is a personal thing, with many possible approaches, including a simple journal or diary, seasonal calendars or records by plant or species; qualitative evaluations of health and yields, and dated, clearly labelled photographs would undoubtedly enhance their usefulness. Also useful would be initial and recurrent soil tests, even of the simple 'jar method' (Mollison, 1988 p.187) type, that could, at the very least, indicate changes in soil organic matter over time. All record keeping will require good maps that ensure plants are easy to locate.

2. Mapping significant plants

It was vital for this, or any similar survey to map the plants' locations as accurately and with as much detail as possible. The original maps of the Main Orchard and Ornamental Area were detailed but difficult to update. Clive Williams' excellent maps are an investment in the future of the Field, making this research easy to update and far more accessible; any future manager, researcher or visitor will be able to find specimens easily with their help. It should be feasible to create a guided tour that could be loaded onto a handheld GPS module or even a GPS-enabled mobile phone. With the correct permissions from the Ordnance Survey, the maps could be loaded onto the website, and the creation of a virtual online tour may be possible. However they were costly to produce and the expense may be considered unwarranted unless they are used for further research; the creation of similar maps may not be appropriate for other sites.

3. Assessing the condition of the Native Woodland and Coppice areas

Liz Turner completed her survey of these areas, finding significant natural regeneration of native species, and the natural succession process commencing, with understorey Brambles and Willows, in particular, making way for a variety of native ground cover plants. Her comment that the "overall effect is of a young woodland starting to establish itself" was echoed by the two wildlife surveyors, although both comment on a dearth of native ground layer plants there. Notably, she identified a young English Elm growing just to the south of Glade two. Her expertise has been valuable, both in this part of the survey and in the Scoping Study, and her management recommendations, including the thinning of some very close grown areas and the coppicing of Sweet chestnuts for pole wood, would ensure the survival of

interesting specimens and increase the productivity of the areas without compromising their wildlife value.

4. Assessing the ecological health of the Field by way of Breeding bird and Invertebrate surveys

The health of an ecosystem on any site is reflected in the number and variety of species of animals inhabiting and using it. These surveys proved an inexpensive way of demonstrating the wealth of wildlife at Penpol comparative to the agricultural land surrounding and preceding it. The surveyors worked for or were suggested by the Cornwall Wildlife Trust, the most logical source of expertise for such work. Local Wildlife Trusts are probably the best placed to suggest appropriate surveyors, although academic institutions with a local presence may also provide help and suggestions. Along with the Wildlife Trust's recommendation, the surveyors' Curricula Vitae provided the means of checking that their expertise was appropriate.

The ornithologist Peter Kent needed only to walk around at the appropriate times and listen to identify breeding birds on the Field, but his comments on the vegetation reflect his experience in managing environments for the benefit of native birds. Further brief surveys could identify birds overwintering on the Field.

The invertebrate survey was constrained, partly by the inclement weather and limited time available, and partly by conforming to PFAF's vegan principles, thus limiting in the species that could be identified. However, Patrick Saunders and his colleagues were both aware of and sympathetic to those principles and worked within the constraints. The report makes quite detailed long-term management recommendations for the benefit of wildlife, and Mr. Saunders has made it clear he would be happy to give further advice. His recommendation for bat and dormouse surveys could be implemented to provide further proof of the wildlife value and uniqueness of the site.

5. Interviewing current and previous participants in the Field experiment

The questionnaire (Appendix 9) proved a useful framework for the interviews, eliciting quite detailed information, which helped to understand the aims and progress of the designs. The interviews also provided some details of the changes and in some cases, decline in the management of various areas over the years. More would have been learnt if other participants could have been persuaded to contribute their knowledge.

Comments on results

Significant plants

The Field experiment has proven that some genera, notably the Seabuckthorns, *Berberis*, *Crataegus* and *Elaeagnus* species, grow and fruit well in the Southwest's maritime climate. Other genera, such as the *Amelanchiers*, will grow and thrive but sometimes do not fruit prolifically, as their chilling requirements are not always met in the mild winters, and the increase in shade levels can inhibit fruit formation. In some species, such as the Kiwi, Japanese dogwood and Bentham's cornel, only some cultivars yield worthwhile fruit. The choice of cultivars suitable for a site is extremely important (Crawford, 2010), and known cultivars are essential for the production of worthwhile fruit or nuts from many species.

Potential for propagation

There is great potential for propagation from significant plants growing at Penpol, for use on the Field or export from there. Suitable plants, such as the Thorns *Crataegus schraderiana* and *C. baroussana*, the Quebec berry, and the evergreen *Elaeagnus cordifolia*, most prolific fruiter of the genus at Penpol, in the Ornamental Area, the Willow-leaved seabuckthorn trees in the Meadow, the Main Orchard and the Robert Hart Garden, and the prolific Salmon and Mrs Wilson's Barberries in the Main Orchard, are listed in the section titled "The plants". Which plants are most in demand would need to be determined by some basic market research and the potential for allowing pre-ordering of specimens, especially online, could usefully be investigated. The desirability of plants can reflect the results of research into their nutritional and nutraceutical properties, such as that given in the 'Plants' section; detailed data on each plant in the spreadsheets of Appendix 1 could also yield information useful in taking decisions on which specific plants are to be propagated.

Tree seeds are useful for large-scale propagation, although many species in the Native woodland may not be ideal to propagate from, as "in general tree seeds for growing should be collected from mature trees" (Liz Turner, Appendix 3). However, seedlings can vary immensely, especially in yield, and many of the larger plants do not breed true. The timescale for assessing seedlings or new tree cultivars is long; the fastest method to assess seedlings is to grow them until they have sufficient budwood, and then graft scions from them onto a compatible mature tree, in order to get fruits relatively rapidly. According to Frank Schuurmans, grafts from older trees give fruit earlier, so where extant seedlings appear promising, the grafting process should yield fruit even sooner. Runners, cuttings and budwood for grafts are effectively clones, and therefore certain to be identical to source plants. Unfortunately, many of the specimens of interest either are not named cultivars, or are unidentified and possibly unidentifiable. In the latter cases, this may be a bar to any commercial exploitation. Where seedlings have grown to fruiting age, as in some of the

hedges (e.g. the Hazel hedges in the Main Orchard, *Rosa rugosa* and *Elaeagnus* species hedges in the Ornamental Area), the best specimens can be selected for taste and yield. Rootstocks of several fruiting genera, such as *Crataegus*, *Berberis* and *Pyrus*, suitable for grafting budwood onto, can be found in planted seedlings and natural regeneration in the Arboreta and Native woodland.

Problems with progressively poor ripening of apples

The fruit of some Apple trees might fail to ripen because of the slightly cooler summers but the budwood for some of the Apple cultivars was taken from trees in Cornwall or Devon, which ripened their fruit without problems, suggesting the failure to ripen has other causes. The most obvious of these would be shading from the windbreaks and hedges in the Main and Addy's Orchards, the tallest of which have now been pollarded, and the acidity found by soil tests in the Orchards. The degree of acidity is puzzling, and various factors could be contributing. These include the area's high rainfall (1060—1290 mm or 42—51 in, average 1971—2000; Met Office), as rain is slightly acidic and will flow rapidly through the free-draining soil. The increased organic matter in the soil, whilst improving its health, can also add to acidity, as decaying organic matter produces acid (H^+) ions, several weak organic acids, and carbon dioxide, which reacts with water in the soil to form weak carbonic acid. These contributions to soil acidification are generally very small, and would typically be measurable only after many years of accumulated effects (Johnson, OSU). Another potential cause of acidification is the removal of alkaline elements such as potassium, calcium, magnesium and sodium in the fruit crops; each medium sized apple contains, on average, 195 mg of potassium, 11 mg of calcium, 9 mg of magnesium and 2 mg of sodium (USDA figures). One further possible contribution might come from any quantities of windfall apples left to lie and decay under the trees. As the acidity found in the Orchard soils will undoubtedly affect the trees' health and the quality of their fruit, this is a problem requiring further investigation, especially since it might indicate the possibility of soil acidification elsewhere on the Field. The design of the orchards, with grass predominating under an open canopy, largely of Apple trees, needs more inputs to stay healthy, even if the grass was mown more often. A potential remedy for this problem in the Orchards is the planting of concentrations of deep rooted perennials that accumulate minerals, such as Comfrey and Chicory (Whitehead, 2004, p.50; Crawford, 2010, Chapter 6) under the Apple trees, and more nitrogen-fixing shrubs around them.

Overview and conclusions

The Field was originally intended as an experimental, educational and demonstration site for sustainable, minimal-input, vegan–organic, wildlife–friendly permaculture. As such, it is unique in terms of its size and longevity, and has proven that this radical regime can transform a windblown, eroded agricultural 'desert' into a verdant, fertile, sheltered landscape, producing food, providing wildlife habitats, and increasing soil organic matter, without inputs of synthetic or animal manures. It also has probably the lowest carbon footprint of any food producing system. However, as the current management problems demonstrate, it has not proven that this improvement is sustainable, nor that harvests of any significant scale are obtainable over the long term; there are two main reasons for these unresolved issues.

The first is the legal problem of planning permission, which prevents anyone living on the site; this impedes harvesting and maintaining the many productive plants on the site, and by preventing the continuous proximity of people, effectively increases bird and other predation on many of them. It is likely that planning permission can be obtained for at least one family dwelling and an educational facility building, if a properly detailed argument were put forward, based on the Field's importance as a botanical and educational asset. If it is redeveloped and properly maintained along the lines of the original design objectives of both of the Ferns, this is eminently possible. The second reason arises from conflicts over the rights and responsibilities of the people involved with the management of the Field, compounded by the current lack of clarity regarding its purpose, which is strongly inhibiting its current management and future potential. Whilst these conflicts are outside the remit of this report, elucidation of the purposes and objectives of the Field, and the balance between its experimental, educational, wildlife sanctuary and food producing functions are absolutely vital to deciding its future.

For Ken, the Field was an experiment intended to evolve and change over time, with plants being placed where he believed they would thrive with minimum attention, and removed when they had outlived their usefulness, allowing the implementation of a permacultural succession in order for the site to continue developing its potential fertility and productivity. This succession has not been much implemented, to the detriment of plants, productivity and design sustainability. Examples of this are the unfelled Alders of the westernmost windbreak competing with the slow–growing Austrian pines planted in their lea, and the towering Lawson's cypress trees west of the Central Orchard. Another strong design tenet for Ken was the dispersal of conspecific plants so that no concentrations of plant species could facilitate pests and diseases, and so that mutually beneficial assemblages of companion plants, sometimes called 'guilds', can develop. This informed the design of the various 'mini-gardens'

of the Ornamental Area, the Arboreta with their fruiting trees, and what Ken termed the woodland or forest gardens, which he describes as "the farms of the future" (Fern, 1997 p.265), of the Old Veg and Nursery area and what is now the Central Orchard. The optimal plant structure of a forest garden is modelled on that of "young natural woodland" (Crawford, 2010, p.17), and the inevitable thickening of canopy cover over the years requires proactive maintenance to ensure the continuance of food production, including the removal or significant pruning of some plants and the replacement of others, as the ecosystem develops. This has not happened at the Field, and indeed, for Ken, the balance of emphasis has shifted from food production function to wildlife sanctuary. He would like to see the Field enjoyed by and satisfying the people who use it, and restored as an educational and demonstration area, where people can come and learn about the regime through active participation. Nonetheless, he is "really, really pleased with what has happened there", even though it has not achieved as much as he had hoped for, and is quite happy that it is more wildlife haven than productive or educational site, as the health of the land has been restored. The reason that half the Field was planted as 'native woodland' early on was to create a nature reserve (Ken Fern, 2009 interview). He remains too unwell and too occupied with the education of his children to be involved in any practical way, and eats little of the food harvested from the Field.

Addy Fern, on the other hand, continues to work hard to achieve year–round edible harvests from the Field, and to prevent its degeneration into impassable scrub and woodland overrun with Brambles, whilst respecting both the original design plans and the incoming wildlife. She cannot fell or thin windbreaks, or use the mower on the rough grassland; she manages the Orchards, the Meadow, Shed, Ornamental, and some of the Veg and Nursery areas of the site without significant help, and tries to maintain much them as initially planted. Whilst she has created some mixed woodland garden beds that are working well, she does not feel able to experiment on the scale that Ken has, and has not developed or altered his designs, seeking simply to conserve them and keep them as weed free as possible. Her own design parameters are slightly more traditional, and she keeps her Apple trees and other fruiting plants grouped in the Orchards and elsewhere, in order to give them the focused attention she believes they need to provide reasonable harvests. Nonetheless, partly out of respect for Ken's outlook and his belief that it should be possible to share the Field's harvests with wildlife, she does little to protect fruiting trees from birds, and so gets almost no harvest from many of the fruiting bushes, such as the *Amelanchiers* and Barberries. She believes a large and potentially expensive fruit cage is needed to obtain more than minimal harvests. As the ornithologist Peter Kent points out, "birds are adapted to search out food and are extremely successful at it"; their populations will increase with increased food availability and they do not have any ethic of sharing with humans. For Addy, the Field is predominantly a source of fresh, vitally healthy food, produced according to vegan organic ethics, without poisoning the environment,

killing or causing to kill (Addy Fern, 2009 interview). However, simple conservation of the Field as it is, is not possible, because the plantings will, and always were intended to change as the systems matured. As it is, the Field is functioning as an imperfect nature reserve that grows small amounts of food, and to do so requires the input of nearly all Addy Fern's available energy, with contributions from Phil James and various volunteers. If all work on the Field were to cease, it will not only lose its value as a vegan-organic experimental site but will also deteriorate as wildlife habitat. So-called 'natural' woodland is the result of human management, typically over the centuries, and a mosaic of open and closed canopy areas is essential for biodiversity, as Patrick Saunders makes clear in his report.

For the Field to become more than a memorial garden for a good idea, which effected enormous change on the landscape, its natural fertility and productivity, but was ultimately unsustainable, it needs rejuvenation and some aggressively proactive management. The experimental facets of the site need to be developed, monitored and recorded coherently and in detail; without good records, the Field cannot succeed in communicating any ongoing results from the multitude of experimental plantings. The educational facets of the Field should also be developed and expanded, because the relevance of the work there will increase as demand for resources outstrips their limited supply and generates constraints on agricultural inputs. Liaisons with educational establishments and students need to be initiated and maintained, so that the information from Penpol is available to mainstream plant sciences. Because of the complexity of the plantings there, and the inaccessibility of the Field by public transport, this cannot be achieved without, at least, a resident manager and facilities for visiting students to stay for short periods. The pattern of necessary work is utterly different to that of mechanised, oil-fuelled agriculture.

Agricultural inputs, from whatever source, will be in increasingly short supply in a post peak oil world, and the ability to produce food on a field scale, without large investments in fuel, labour and protective materials, is gravely under-researched. In order to maximise productivity without these inputs, a high diversity of plants is required, which, whilst this confers great ecosystem resilience, need regular, frequent work to maintain and harvest. The size of the Field, the lack of any available properties to rent close by, and the fact that it is not accessible by any form of public transport, combine to make it impossible to manage it effectively without contravening the low input ethic, part of which is the avoidance of car usage.

The Field offers many opportunities for research into sustainable, low-input food production. The fact that both Ken and Addy's styles of planting co-exist on the Field allows for comparative research, using the different ecosystems there to investigate plant viability and productivity. This would require identical species, on identical rootstock, and of identical age and history, planted in different areas. Unfortunately, no such controlled experimental

planting has so far taken place and currently, identical species in different areas are of different ages or cultivars, and so difficult to compare. A few species, such as Darwin's barberry, Tansy-leaved thorn and Willow-leaved seabuckthorn, have specimens growing in more than one ecosystem but are of different cultivars or age, making comparisons unreliable. There are, however, notable differences in the overall health of the plants in different areas, with the Ornamental Area, the Meadow, Robert Hart Garden and part of Arboretum West showing greater percentages of healthy plants. This may be a result of similarities of design, planting or density in these areas, which are nearly all open-canopied with mixed plantings. There is much to research there, especially if the investigation into food production is a serious intent. Because of its size, diversity and maturity, the Field is an ideal place for studies on the co-existence of food producing ecosystems and wildlife, on the ecology of low-input remediation of degraded arable land, and on building up soil fertility, which could take place alongside the hands-on teaching of edible plant husbandry. It also offers sufficiently diverse environments in which a methodology for identifying the best species and cultivars to grow in any given climate and situation can be developed. The suitability and productivity of cultivars is far more important when inputs are limited, and food production is vital. Some of the plants at the Field are not thriving or fruiting as well as they might, possibly because different cultivars or different rootstocks are needed. The importance of selecting the right cultivar for the climate and situation has not been taken into account in many of the early plantings, and Addy has already criticised some choices of rootstock.

With its extant supply of rootstock sources for unusual fruiting species, Penpol could also become a UK base for importing scions from suitable cultivars, if a Certificate from the Horticultural Marketing Inspectorate can be obtained (http://ehmipeach.defra.gov.uk/). Ken Fern is aware of considerable research into rare fruit cultivars, Juneberry in particular, especially in the US and New Zealand, and affirms that specimens of named cultivar need to be obtained and tried out here, and, if they are successful, propagated from vegetatively (Ken Fern, 2009 interview). Penpol could provide plants for our future, and match Martin Crawford's description of PFAF as "a resource centre for rare and unusual plants" (Crawford, 2010, p.373).

Recommendations

Research into comparative yields / flourishing from different contexts

The variety of ecosystems at Penpol offers opportunities to compare vigour and yields from the same species and cultivars under different management regimes. A rigorous approach is recommended, planting identical species, on identical rootstock, and of identical age and history, in different types of area, in order to make useful, reliable comparisons.

Management

Resident manager

Because the implementation of the designs for the Field are complex, and the areas involved large, a manager taking responsibility for the work, including the necessary monitoring and recording, would need to live within easy walking distance so as not to incur an unacceptably large carbon footprint by driving there and back daily. The same is true of students whose research or study course requires more than one day at Penpol. An on-site office, where enquiries are responded to daily is also a needed if any liaison with educational or horticultural establishments are to be initiated and maintained. The lack of available local accommodation makes residential planning permission the logical and, environmentally, lowest impact solution.

Record keeping

If Penpol is to function as it was intended again, good record keeping is essential. The most appropriate format for the initial recording of data will depend on the person responsible. To track changes over the longer term, a spreadsheet or database format, correlated to the survey maps, is the most appropriate and least complicated option, and will facilitate the communication of research results and other plant information. It is indispensable that the records be easily understood by interested parties, and accessible to students, researchers and new record keepers when managers change. The manager/record keeper should develop a clear procedural sequence to convey botanical information from the Field to the new PFAF website, in co-operation with the website's management.

Pro-active clearing / replanting

A programme of clearing, thinning and replanting is recommended. Many of the designs for the Field were intended to be fluid, following sequences similar to naturally-occurring successions; some plants have already yielded all their prospective fruit and information, and

are overdue for replacement. A far more proactive approach to the plantings is needed to fulfil the designs' potential to identify the best species and cultivars.

Balance of food for humans and wildlife

The ethic of sharing the Field and its produce with wildlife is an important part of the design. Much of the fruit grown at Penpol is effectively donated to the local bird population, which is likely to continue increasing until limited by the supply of available food. Fruit cages are necessary if humans are to harvest anything more than minimal amounts of many species, especially those of the *Amelanchier* and Currant genera. Such cages need not enclose all the trees and bushes of any species, nor deny ample harvests to the birds. Many tree trunks there are protected from deer and rabbits, without apparently deterring their occupancy of the land, so the protection of some fruit from bird predation would not represent a large ethical divergence, and is recommended if increased human involvement with Penpol is to succeed.

Propagation

Along with botanical information, plants are the Field's greatest and most marketable assets and potential products. Some are quite rare, and all plants propagated from those at the Field would undoubtedly benefit from the added prestige of their origin and the association with the Ferns and Plants for a Future. Some market research into demand will be required before beginning any large-scale propagation.

Import and experiment with suitable cultivars

The degree of success in experiments with productive plants could be significantly enhanced if Penpol can import interesting new cultivars of fruiting species, even those that require vegetative propagation, from countries where new selections and breeding of particular species is taking place. Once trialled, the best cultivars could then be introduced to the rest of the country, or continent.

Teaching

Facilities for educational programmes, especially the 'teaching by doing' courses once undertaken at Penpol, are an essential part of communicating the lessons of the Field, and need to be developed so that they are less weather-dependent, and can proceed despite periods of inclement weather characteristic so many Cornish summers. Ken Fern envisaged a classroom under cover but not closed off from the Field, which would be ideal. An office to ensure consistent communication with students and educational establishments, and storage

space for students' instruments and provisional records are also essential to accommodate any enhancement in teaching at Penpol.

The plantings at Penpol field have tamed the wind and healed the land;
they still have much to teach us.
CW 2010.