



A MANAGEMENT STRATEGY FOR MAINTAINING A FERAL GOAT POPULATION ON THE BURREN THAT IS SUSTAINABLE AND DOES NOT CONFLICT WITH FARMING INTERESTS, ALONGSIDE A STRATEGY FOR PRESERVING THE REMNANT OF THE OLD IRISH GOAT BREED THAT IS RETAINED WITHIN IT; BEING THE OUTCOMES OF A CONFERENCE ORGANIZED BY THE BURRENLIFE PROJECT.

Raymond Werner, January, 2010

This report is in three parts. Firstly, a draft management strategy was devised for the purposes of being a discussional framework for the conference. Secondly, the origin and value of the Old Irish goat as a breed was reported on. Thirdly, the draft policy was incorporated into the outcomes of the presentations and workshop discussions of the conference.

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ONE: DRAFT MANAGEMENT STRATEGY AND DISCUSSIONAL DOCUMENT FOR THE BURRENLIFE WORKSHOP ON THE FERAL GOATS OF THE BURREN

Raymond Werner, February, 2009

INTRODUCTION

To be coherent, a management plan for the Burren feral goat *in general* will need to take note of three distinct but interwoven issues. These are:

1. preserving the Old Irish goat of the Burren
2. Maintaining a viable feral goat population of what has now become mixed type
3. Sustaining this feral goat population within the present perceptions and agricultural practice of the Burren

At the present time, views will differ with regard to a desirable and sustainable number of feral goats on the Burren. In all likelihood, the numbers needed for land management (as a part of an animal grazing scheme) will exceed a total that would be tolerated by agricultural interests within current thinking; whilst considerations around the maintaining of a healthy population (preventing inbreeding) will be an additional issue.

The development of a management programme will be based upon the following givens:

1. it is too late to save the Old Irish goat within the existing population structure of the Burren feral goat
2. Without decimating the present feral goat population (eradicating up to 90% of the goats- which is unthinkable), the basis of maintaining a feral goat population will have to centre upon mongrelized stock
3. A management solution for the feral goat in general will need to involve farming interests and humane removal of stock- preferably for a constructive purpose- on a regular basis

THE BURREN FERAL GOAT: THE TYPES ENCOUNTERED ON THE BURREN

1. Typical phenotype of the Old Irish goat: *small; cobby; large rumen; short and thickset legs; head long and dished, muzzle may be triangulated; rear squared off; ears small and erect (pricked); neck shortish; any colour but not Swiss colour pattern; horns variable but angle of emergence high; polled acceptable but uncommon*
2. Generalized Old Irish type (showing some degree of Introgression): generally resembles the Old Irish, but small indications of introgression, such as tassels
3. “Egba” type: *often similar to 2 above, but the head is very small and the face slender with quite a refined muzzle. These head characteristics common to both males and females*
4. The Burren type. An emergent type that is settling into a mongrelized intermediate between the old Irish and Modern (Swiss based) goat stock: *tassels; ears larger, held forward; heavier head, straight profile; larger; coat finer, smoother, glossier; dearth of underwool; short coat in males; tassels; loss of dairy wedge shape, courser; neck may be longer and more slender than in old Irish type*
5. Swiss characteristics predominating: *predominantly a Swiss type goat but signs of introgression*
6. Released stock: *may have become established, or very recent releases: bearing all the hall marks of a dairy goat, including classic shape, large udder, string round neck or a collar etc*

THE THREE MAIN ISSUES

1. PRESERVING THE OLD IRISH GOAT WITHIN THE BURREN AREA

This is, if anything, the main priority. Three groups seen in February, 2009, still retained around 10-15% of the Old Irish Phenotype, although introgression is increasing year by year and the chances of an old Irish type male mating with an old Irish type female will be diminishing at an accelerating pace. It is therefore reasoned that the extinction of the breed on the Burren (as in viable genotypes) is imminent.

The conclusion reached is that the breed can no longer be saved in situ, the only hope for its future being by way of removal to save havens, and a breeding programme implemented.

A specific programme for the remaining Old Irish goat stock may be summarized as follows:

- The removal of goats of the right type from various populations as soon as is practicable. A breeding unit should be established that is not less than 50 goats if 25 males and 25 females can be kept, or 50 females and 20-25 males. Taking stock from various locations will widen bloodlines in relation to family groupings. These goats should be placed in a variety of safe havens-established goat breeders (Irish Goat Producers Association); wildlife parks; heritage sites; smallholders; enthusiasts; rare breed centres. One advantage in such dispersal is that some might be willing to take on a single male or more than one male. A herd book would need to be established, and records kept, through the Old Irish Goat Society. The central pivot of the breeding programme will be the herd maintained by this society at present. Only kids bred within this network, centrally monitored by the Society, could be registered; although adult goats could be registered by inspection through the Society.
- Identifying a locality where goats of the old type could be maintained as a feral herd. The National Park would be ideal if issues around wandering males could be solved (safe from introgression). This could involve an area where goats have been eradicated or died out, but in which there is some sympathy for their re-establishment. In principle, a way should be found to maintain an Old Irish goat presence on the hills as part of the history and heritage of the Burren.
- A system for removing Modern type males, linked to wandering males.
- As an outcome of any culling/removal in the future, any goats of Old Irish type that cannot be removed at the time could be tagged for future reference.

- Eventually, the reinstatement of the breed as the ideal smallholder's goat could be considered. This would additionally preserve the breed on the Burren in re-domestication.

2. MAINTAINING A VIABLE FERAL GOAT POPULATION

The goat is a traditional/historical part of the landscape and agricultural practice on the Burren. It has helped to shape and maintain what is generally thought of as a 'natural' landscape. Goats of all types reflect the changing agricultural practice in relation to goatkeeping over the last 100 years- solely Old Irish goat stock, the importation and dispersal of Modern breeds, the latter usurping the former. Overall, a feral goat presence is now firmly embedded in the very concept of what the Burren essentially is. Therefore, maintaining the continuance and viability of a feral goat population is a separate, and important, issue to the preservation of the Old Irish breed.

What is needed is the following:

- A census of the feral goat populations across the Burren
- Information to include: location; numbers; breakdown by gender; nanny-kid ratio; indications of male movement (migration corridors); breed type
- Using the foregoing, an assessment of fertility rate; male movement (genetic interchange and influence on the types); male survival in relation to female survival; degree of introgression in individual populations.
- Formulation of a map showing the above.
- Assessment of the point individual populations have reached; Old Irish base with some infiltration; type in balance (new type emerging); swamping of Old Irish base with Modern type; largely Swiss type: recent mass release of Modern type.
- An assessment of minimum/maximum population size in relation to nuisance/destructiveness; habitat management value; available food sources.
- Built-in possibilities for introducing or reintroducing feral goats into areas in need of land management

3. SUSTAINING THE FERAL GOAT WITHIN MODERN AGRICULTURAL PRACTICE AND PERCEPTIONS ON THE BURREN

Assessing the viability of a feral goat population in relation to healthy stock (inbreeding) and usefulness (land management) is two thirds of the issue, the remaining one being the human factor (tolerance towards the species in relation to intense farming). This falls into two parts; goat presence on the limestone uplands, and goat incursions onto the more productive lowlands. The goats are accused of despoiling pasture; grazing fields meant for sheep and cattle, breaking down walls, and causing damage by browsing in the wrong places.

Ultimately, a viable population will be in balance between its necessary use of available resources (food requirements; shelter; kidding areas; safety); maintaining a healthy population (social organization; population dynamics; inbreeding issues), and interactions with the human population (nuisance and damage; using food resources meant for other stock).

An agreement with the farming community is therefore essential, as the necessary requirements of the goats (necessary use of available resources) may cause some conflict with farming interests. This means that the presence of feral goats on the Burren, and their overall number, would need to be within individual farmer's 'comfort zone'. An equation that takes account of this as a recognized factor would therefore necessarily be divided into:

- The traditional range of individual groups and how this might expand when numbers increase. This takes into account both the traditional, upland habitat of the goats and incursions/spread onto lower farmland as well as what the goats need to survive
- The number per acre in relation to land management
- The minimum number and group composition in relation to inbreeding
- A number that sits well with the farming community (see appendix 1)

In relation to wholesale (whole herd) or small group (mainly male) movements onto farmland, there will be a seasonal aspect to this: spring grass; budding trees; shelter; kidding; nutrients. In respect of this, it has been noted in other studies that groups that are generally confined to upland and bleaker areas will expand onto abandoned farmland, given the opportunity.

MANAGEMENT AROUND INBREEDING

Whatever the acceptable individual herd size, unit composition must be factored in. The ideal male to female ratio is one to one (and this has been seen) although males are more vulnerable and a ratio between 2 and 3 females to every male is more usual.

Without recommending an ideal number in this instance, we can take by way of example a unit of 50 breeding females/females with the potential to breed (yearlings and above, assuming that females become post-productive around 8) as the basis for a calculation. We add to this breeding group older, post-productive nannies that are so essential to group cohesion and leadership: say another 6 or 7 goats. We further add a minimum of 20 males (yearlings and above), and we now have a figure of not less than 77 goats, not counting the kids of the year. If we assume a fertility rate of 0.75, which is entirely reasonable, the annual crop of kids would be around 35 (assuming yearlings are half as successful at rearing a kid, around half 8 year-olds do not kid, an idealized age class structure, a female mortality rate of around 6%, and a twinning rate of 10 %.) Other calculations, using other variables, give a figure of around 36-37 kids.

Mortality rate is an unknown factor, as yet. But if we assume a loss of 3 females and 4 males annually, then 7 goats will be needed to replace males and productive females. This means an annual removal of around 28 to 30 goats. These will be kids if the age classes are stabilized, although there could be an alternative model for adult goat removal.

OUTCOMES AND OVERALL CONCLUSIONS

- It is too late to save the Old Irish breed within the existing feral goat population of the Burren
- Preservation of the Old Irish breed must initially be by way of removals of selected stock to safe havens
- There should be a longer term intention to reintroduce the bred into a feral state
- An immediate strategy for delaying the demise of the breed as a feral animal would be to manage males for type (removing the Modern type males and obvious crosses/mongrels)
- Preserving the Burren feral goat is a separate issue to the preservation of the Old Irish goat
- Even as mongrelized stock the Burren feral goat has a role to play in tourism, land management, and the more recent history of the Burren
- Management of the Burren feral goat in general should build in the removal of types 5 and 6, as and when management occurs. This would assist in the development of a type (4 and 5) that is more suited to the habitat, and the preservation of goats more of the old type
- Agreement on an idealized population structure and optimum numbers, adjusted to an assessment of land management needs and preventing inbreeding.

FINAL THOUGHTS

The goat, be it domestic, free-range or feral has proved to be a highly successful animal on the Burren: being well suited to its climate, terrain and food resources.

In essence, the feral goat *is the Burren*, being symbolic of what the region represents. Could this be formalized?

Its loss would be to not only denude the area of a huge potential in relation to heritage, tourism and land use, but to create a void in the work to save rare breeds in the Irish Republic generally.

The key issue is the integration of the feral goat into the collective consciousness of the local community, which goes beyond its physical presence to what it represents.

The Old Irish Goat Society is central to its preservation.

TWO: THE ORIGIN AND VALUE OF THE OLD IRISH GOAT, AND THE NEED TO RECOGNIZE IT AS A LANDRACE TYPE WITH RARE BREED STATUS

The origin of the Old Irish goat is crucial to an appreciation of its value generally, its value specifically to Irish history, and the need to preserve it with rare breed status.

It has generally been assumed that the Old Irish goat was introduced during the first phase of the agricultural Neolithic in Europe, meaning that it is fundamentally of similar type to the generalized goats breeds to be found across western and central Europe. However, a closer look at European goat history in terms of people movements and breed development would suggest that seven theoretical origins for the breed need to be taken seriously. These are:

- Introduced during the first phase of the standard Neolithic, meaning with the first wave of agriculturalists
- Introduced during the Bronze Age, after goats with twisted horns and long hair had become fashionable in the Middle East
- Introduced by Steppe people (Battle Axe culture) during the late Neolithic
- Developed during a cold phase in Bronze Age Scandinavia, and then taken to the Netherlands, British Isles (including Ireland) and Iceland during the period of Viking expansion
- Developed out of the general breed development, based upon climate and husbandry, that occurred across Europe; not time specific
- Originated with the domestication of the Scottish Wild goat, from which developed the theory of ‘reversion to wild type’ in feral goats
- Developed during the intense cold period (deglaciation) at the close of the Ice Age. The breed would therefore be representative of an earlier phase of nomadic pastoralism on the Great Steppe of Eurasia prior to the agricultural Neolithic of early post glacial times

All seven theories are based upon supposition as a starting point for further investigation, and the most popular three (1, 2 and 5) began with assumptions that have not been further tested for an evidence base.

The research base used at present has been to consider the theories in terms of testing the assumptions that have been made. This has been divided into four areas: proven fact; plausible argument; implausible argument, and an assumption that is falsifiable. When the assumptions for each theory that are critical for it to be considered plausible are reviewed, the critical factor for acceptance or rejection has been whether one or more assumptions can be falsified. If this is so, then the whole theory becomes unworkable. If no assumptions can be falsified, then the weight of evidence moves towards provable in relation to fact based knowledge and plausibility.

Before each theory was investigated in detail, the ‘givens’ in general, as in what can generally be considered to be true regardless of any theory, were reviewed.

This began with goat type in relation to breed development, and how the Old Irish goat fitted into such a schema. All attempts to classify the five hundred or so breeds and types of goats worldwide have so far proven to be unworkable and unsatisfactory, due in part for the criteria used, such as horn and ear form. In this present research, the classification used is based upon domestic goat origins and people migrations historically in relation to climate, topography, fashion and husbandry. Using this system, five basic types of goat, worldwide, have been identified:

- The Standard goat. Very much generalized and undifferentiated, it is quite similar to its wild goat progenitor. It has a world-wide distribution. Variants are a disproportionate sub-type (Dwarf goat) and proportionate small sub-type (Pygmy goat). The so-called 'Swiss breeds' are an improved variant.
- Mohair goat, as exemplified by the Angora breed. Associated with the Middle East.
- Steppe-Desert or Scrubland goat, usually associated with lop-ears. This type is distributed through southern Europe, into the Middle East (where it originated) and thence on into India and into southern Asia. The Anglo-Nubian is the exemplar.
- Lop-eared Long-haired type. Developed in the Middle East, and largely confined to this region.
- Cold Weather goat. Found across the whole of the most northerly parts of Eurasia, from Ireland and Iceland to eastern China. Has been taken by later historical migration into the Middle East and on into the Balkans. Essentially a cold weather steppe goat and strongly associated with cashmere or Pashmina down. Composed of nine breed groups.

Where the Old Irish goat fits into this classification is that *all* its breed characteristics associate it strongly with the Cold Weather goat type, and in particular with the breed group defined as the Northern Breed Group. This group comprises the following breeds: Icelandic; British Primitive (Old Welsh; Old Scotch: Old English, and Old Irish); Norwegian landrace; Swedish landrace; Dutch landrace, and possibly Finnish landrace.

Based on the Old Irish breed being a representative of the Northern breed group, Cold Weather type, the givens prior to investigating each theory were considered to be:

- Europe as a whole had two original domestic goat populations, one distributed throughout central and southern Europe, the other confined to its north-western periphery.
- These two types are totally different in conformation and characteristics.
- One represented the Standard type, which survives today in pure form throughout central Europe, and is sometimes called 'the Alpine' goat. The second represents the Cold Weather type, and has a limited distribution on the northern periphery of Europe. Although originally of Standard type, the goat stock of southern Europe has been thoroughly mixed up, historically, with various importations of goats of Steppe-Desert type. Today, breeds along the Mediterranean region represent a cline between breeds that are largely standard, a mixture, and largely Steppe-Desert.

- It is reasonable to assume that the Cold Weather type developed out of the Standard type, as this has an irrefutable historical basis.
- The characteristics of the Cold Weather type, as found in northern Europe, are very much in keeping with its rapid differentiation during a period of intense cold and poor husbandry.

Given the givens, as it were, the only point of contention in relation to the seven theories is *where* and *when* the type developed. This is in keeping with asking where and when the old Irish goat originated.

Related to this, there is the issue of how the Northern breed Group and Standard Breed Group in Europe relate to each other; meaning (1) did the Cold Weather goat develop out of the Standard goat in Europe? Or (2) was the Standard goat the first to arrive in Europe, followed by the Cold Weather goat? Or (3) was the Cold Weather goat in Europe, but confined to the north-west, first, with the Standard goat arriving later? All seven theories are in tension with these three possibilities.

All seven theories were then reviewed in a multi-disciplinary way: the origin of the domestic goat; the development of goat types; historical movements and migrations; how and why breed characteristics developed; the influences of man upon the goat in relation to fashion and necessity (husbandry); climate over the period that the goat has been domesticated; geography and topography.

Then, with each theory, the facts and assumptions on which it was based, were tested in the way already outlined.

In relation to the givens, the only theories that met the criteria associated with these were descent from the Scottish Wild goat in situ; introduced by the Steppe people in the late Neolithic period; and developed rapidly from goats associated with a Neolithic pastoralism at the close of the ice Age.

When the basis on which the theories were established (facts and assumptions) were looked at, the following emerged:

An introduction during the standard agricultural Neolithic could be discounted as its two main assumptions was falsifiable. Similarly, a Bronze Age introduction was discounted as three of its six main assumptions were falsifiable.

The theory associated with the Steppe people was more promising, but also discounted as one of its five main assumptions was found to be falsifiable.

The Bronze Age Scandinavian theory was based upon five assumptions, three of which were falsifiable; whilst the theory of a general development out of the Standard goat was falsifiable on one assumption out of three.

The Scottish Wild Goat theory was generally falsifiable, whilst the deglaciation theory, based on there being a phase of Neolithic pastoralism in Europe prior to

the Neolithic proper, was found to be virtually provable, being based upon six essential assumptions, five of which were fact and one plausible.

It is therefore safe to assume that the only tenable theory relating to the origin of the Old Irish goat, as it relates to the origin of the Northern Breed Group of Cold Weather goats in general, is as follows:

Following domestication, goats of Standard type were taken directly northwards from Anatolia and into the region of the Great Steppe, which during the late Pleistocene was one vast temperate grassland abounding with 'game'. Movement was easy, as the Black Sea did not then exist. There, the goat was an essential part of a culture of pastoral nomadism alongside hunting.

As the Ice Age came to a close, and during a period of intense and bleak cold, the Standard type evolved quickly into a Cold Weather type with all the characteristics today associated with the Northern breed Group.

During the Mesolithic period, this pastoral nomadism continued, moving northwards as forests grew up. Possibly with an epicentre that today is the area of the North Sea, these nomadic pastoralists were divided into two groups when sea levels rose towards the end of the Mesolithic and the North Sea was formed. Thus the Northern Breed Group was segmented into a western area (the British Isles with its British Primitive goat) and an eastern area (Scandinavia with its Nordic goat).

The implications are that the Old Irish goat is a genuine native breed as it was present in Europe prior to the period when Ireland was cut off from the rest of the British Isles by rising sea levels. It is therefore of immense historical values and worthy of preservation irrespective of it being a rare breed.

THREE: INCORPORATING THE OUTCOMES OF THE BURRENLIFE WORKSHOP INTO A PROPOSED MANAGEMENT STRATEGY

INTRODUCTION

The day began with an introduction that outlined the rationale for, and the progress made by, the Burrenlife Project. Mentioned in particular were new models for sustainable agriculture; the impact of feral goats on the area, both as a perceived nuisance and potential/actual grazing tool, and the reasons for protecting the Old Irish goat. Coming out of this, the two main issues were agreed as being (1) the reasons for protecting the old Irish goat, and (2) the impact of the feral goat in general on the livelihood of the Burren farming community. If a strategy could be evolved that managed the feral goat population at a sustainable number that did not impact adversely on farming interests, then it would be possible to secure the future of feral goats on the Burren in general, and the remnant of the old Irish breed there in particular.

The first session concentrated on the origin, history and importance of the Old Irish goat. Its rarity on the Burren, focussed upon its imminent extinction, was contrasted with its importance to the history and agricultural development of the Burren.

The main thrust of the workshop then went on to consider the following: identifying and filling gaps in our knowledge; the ongoing management of the Old Irish goat; logistical issues; the potential uses of feral goats, welfare issues; using feral goats as a sustainable resource, and networking and building trust within the wider community.

“Next steps” were then pursued as a vehicle to make proposals for a feral goat management plan.

Although the format of the day was designed to weave consideration of the feral goat in general and the Old Irish goat in particular into a generalized discussion under the various topic headings, the finalized management strategy, as present here has reorganized the discussions and decisions into separate proposals for the Old Irish goat and the generalized feral goat on the Burren.

The outcomes of the workshop in relation to the **feral goat generally**, may be divided into eleven main areas. In order of priority and continuity, but running in two strands, these may be defined as:

- Reducing, then eliminating, the points of **tension** between feral goats and local interests by building **trust, education and communication**. Following this,
- a **management body** representing all interested parties can be formulated to devise and agree a general **management strategy** incorporating
- a **protocol for welfare issues** and removal.

Running alongside this, and to make the former workable:

- An all Burren **census** should be held, with a proposal for
- interim **population control**,
- including a **pilot removal**,
- and provision for an ongoing **monitoring of numbers**,
- along with a **behavioural study**

Longer term objectives will be:

- Work to establish the feral goat as the **emblem of the Burren**,
- along with developing its **tourist potential**,
- and work to define its **legal status**

With regard to **the old Irish goat**, the outcomes were seen to fall into six main areas, these being:

- Immediate work to **preserve** a breed in crisis (critically endangered)
- Support the **Old Irish Goat Society** in the foregoing
- Work to afford the breed **rare breed status**
- Develop it as a **smallholder's animal**
- Establish its **status on the Burren** longer term
- Work towards using the Old Irish goat on the Burren as a focal point for **preserving and promoting the breed nationally**

A MANAGEMENT STRATEGY FOR THE BURREN FERAL GOAT

(1) Reducing to eliminating the points of tension between the Burren feral goat and farming interests.

The major points of tension were identified as being the spoiling of grasslands and the knocking down of walls during their peregrinations. This is said to have a discernible impact in relation to feeding costs, time spent in repairing walls and the potential to be fined for not keeping walls in good order. Additionally, there is an image of 'hundreds upon hundreds' of goats on the Burren, with a perception of the population being out of control.

The tension caused by damage to walls could be alleviated if the goat is recognised as being a part of the Burren landscape, and farmers could be compensated as opposed to blamed for any damage caused.

The despoiling of grasslands is a more difficult issue, and there is a need for a behavioural study in relation to seasonal goat movements. Female aggregations are obviously targeting spring flushes in grassland areas, which coincides with the kidding season, although there is no clear picture of home ranges in relation to habitat use and seasonal movement. Also, the 'damage' caused by female groups as opposed to male groups may be targeted at different vegetational zones.

A perception of numbers is a vital issue, and there is a need for an all-embracing and accurate census. Certainly, the usual interpretation is of herds numbering between one and two hundred, and this is often the case. It might well be that a plan could be formulated that would maintain individual herds at a lower number (say between 50 and 100), whilst balancing this with a reintroduction of herds to areas where they have been exterminated within living memory. A more even spread of goat aggregations at more manageable numbers would benefit the farming community, the tourist industry, and any plan to use feral goats to maintain the landscape as grazing tools.

It is interesting that although the stakeholders see the goats as a nuisance, they don't necessarily want to see them go. There is a view that numbers should be controlled but not reduced, whilst alternatively some would like to see fewer goats on their land. Frustrations in the past, however, have resulted in extinctions in relation to herds.

Way forward. Look to practical ways to alleviate the costs and concerns that farmers experience for having feral goats on their land. Explore how farmers may be compensated for losses (legal, grant implications). Investigate how the legal status of feral goats might be changed to accommodate this.

(2) Education and communication

This area of discussion was considered to be pivotal to easing tension and providing clear pathways to move on.

Getting the farming community actively engaged, both practically and in debate, was considered to be the first priority. Farmers were considered to be pivotal to any decision-making as they have a good idea of carrying capacity generally, and any management strategy devised will begin with an agreement on numbers in relation to a viable population. Thus, how many goats overall that the farming community will tolerate is one aspect of the broader picture that includes issues around inbreeding, habitat management, a profile suitable to the needs of tourism and so on.

Building trust and bridges is therefore the first essential. Within this, it was agreed that there will have to be clear channels of communication, although where and to whom this communication is being channelled is also an important consideration.

Giving the feral goat of the Burren enough of, and the right kind of, publicity in terms of educating the community as a whole, is a priority. Suggested outlets are: shops, libraries, community centres, wildlife parks, zoos, museums, heritage sites, public awareness meetings, time on the radio, books, postcards, pamphlets and so on.

Within community centres, the older members of the community could be encouraged to share their past experiences of farming on the Burren in relation to goat keeping, their remembrances of the old type, how the goats changed over time and so on.

The Irish Dairy Goat Producer's Association could be helpful in positive promotion of feral goats, although the Old Irish Goat Society could well be pivotal in any work to make the feral goat better known in a positive way throughout the Burren.

Wildlife parks and zoos, along with the goatkeeping community, could not only be beneficial for publicity outlets, but might well be able to offer gene banks for stock in the future. Thus, a small group of feral goats in a wildlife park a distance away from the Burren might well encourage the public to want to visit the Burren to see feral goats in the wild state.

Way forward. It is seen that the Old Irish Goat Society is best placed to orchestrate the publicizing of the Burren feral goat across the community. Work could include the producing of a book/booklet on the subject, postcards, posters, meetings by way of example. This has cost-both time based and financial- implications and thus a grant could be considered.

(3) The setting up of a management body

This is considered to be an essential prerequisite to implementing a management plan.

It was emphasised that it would seek to be all inclusive, and although its composition would presuppose the inclusion of self interest groups, its constitution would emphasise the subsuming of these interests into an agreed greater good.

Bodies mentioned were: Burren farmers; the Old Irish Goat Society; representatives of the wider Burren community; DAFF; Teagasc; the Heritage Council; the Local Authority; Clare Animal Welfare; the Environmental Awareness Officer; NPWS; Burrenlife Project; Tour Agents; Academic institutes.

The idea is to bring together quite disparate interest groups that can then feel that they are being heard within a framework that is working within the framework of an agreed policy with mutually agreed aims.

Way forward. Dialogue; meetings; information sharing; working on a policy, and looking at how the body would be constituted. Agree a person or agency to co-ordinate.

(4) Devising and operating a management strategy

This would evolve in the following way:

- Integrate the needs of the various interested parties into an overall policy based upon identifying a sustainable agricultural model for the Burren alongside community/tourism interests generally. Thus, the goat would be seen as a sustainable resource. The basic work has already been carried out by the Burrenlife Project.
- Factor in the compensatory needs that may be entailed by maintaining the existence of goat groups across the Burren
- Factor in the numbers of goats (and their location) needed for habitat management. This in conjunction with the outcomes of studies that look at scrub encroachment and the conservation status of priority habitats, along with the impact that the goats are having, and could have, in terms of their numbers.
- Factor in the minimum number of goats that can be considered genetically viable
- Arrive at sustainable numbers from the 3 foregoing.

Ongoing aspects of the management strategy will involve monitoring the impact on the environment over time by observation and data collection; monitoring the increase in goat numbers in relation to population dynamics within the sustainable numbers model, again by ongoing work; manage the goat type towards the emergent “Burren type” generally, and through the mechanisms built into roundups and removals.

Four aims/potential outcomes were identified:

- Removing the necessity for farmers to roundup and remove goats/herds on an ad hoc basis
- No personal loss for the farming community in time or money
- Restore and maintain the Burren as a ‘traditional’ landscape
- Ensure that management is low key and continuous rather than spasmodic and based upon a frustration model.

It was envisaged that the management body, by way of the stated management strategy, would play a key role in the preservation and promoting of the Old Irish goat. Primarily, this would be through the protection and sound management of the Burren feral goat generally. However, more specific work would need to be carried out:

- Ensuring that in any roundup situation, the goats that are of Old Irish phenotype were identified (preferably by indelible horn painting) if being re-released; cooperating in the removal of good goats to sanctuaries; working longer term towards identifying areas where herds of goats of old Irish type could be maintained on the Burren.
- Recognising that the old Irish Goat Society has an invaluable dual role within that of the Management body in being a society whose aims are to (i) preserve

Way forward. Use the information and data already assembled, i.e. that carried out by Burrenlife, as a basis for filling in any gaps by way of future studies. Work to include all interested groups on an equal basis. Recognition of the key roles of the farming community, the Old Irish Goat Society and Clare Animal Welfare in the management strategy, as these are the key elements affecting all practical- hands on-outcomes. Look at any funding required by the last two organizations to achieve practical outcomes.

(5) Developing a protocol within the management strategy for welfare issues generally and roundups and removals in particular.

Ongoing management will require regular monitoring and roundups. This will require collecting and collating information prior to decision making.

A code of practice will be devised that covers the timing and method of roundups; a sound system for capture and handling; the reduction of stress both during and after the roundup; a policy with regard to where stock rounded up will be sent, and the method and details of transportation. Additionally, a vet would be on hand to inspect animals. It is assumed that any agencies involved in the roundup, from capture to final destination, will have suitable accreditation to be involved in the task.

Perhaps the most important aspect of this discussion was the potential uses of the feral goat in relation to how they can be used as a sustainable resource.

Those removed could be utilised for their meat, skins, hair or horn. Meat involves ethical issues of dispatching in terms of the target community. Skins may have implications for traditional Irish musical instruments. Kid meat could be considered. Trophy shooting was rejected as an option, with implications for convincing farmers that allow for this to have viable alternatives.

Those that remain could be used in the development of eco-tourism. The feral goat is the only good sized mammal living wild in the Burren that is reasonably accessible to the general public. Elsewhere, as in Scotland, 'feral goat holidays' have been devised. The old, that is traditional, practice of removing some kids for kid meat has been mooted. This would have to be regulated within the overall policy relating to the population dynamics of the goats. Obviously, the feral goats of the Burren could not be afforded rare breed status, but if management proceeds towards retaining and developing a distinct Burren type, then it could be considered a distinct and in some ways unique 'breed' over time.

Way forward. Call upon Clare Animal Welfare to produce a working policy that can be reviewed and agreed. This may have funding implications. Operate a training programme. Where legislation stands in relation to roundup and removal should be considered. Ensure that all preliminary work is carried out prior to a roundup. Have proper oversight of all operations to ensure best practice.

Also, a **pilot roundup** has been suggested. This would have the effect of reassuring the farming community that the management of sustainable numbers is actively being worked towards, and may elicit agreement to suspend any ad hoc roundups in favour of a defined management policy. This should be under the general oversight of Clare Animal Welfare to ensure good practice, but can be used also as a discussional base for tightening up a policy. The major factor involved is ensuring that the animals that do not remain are removed to an agreed destination that is acceptable to all parties. Timing of any roundup is critical in terms of welfare.

(6) A census

To date, a census of the feral goat population of the Burren has been attempted twice. The first was with the involvement of the British Feral Goat Research Group in conjunction with the Dutch Landrace Goat Breeders' Association; the second by way of the Old Irish Goat Society following the workshop.

In both instances there were impediments in relation to the areas covered, the herds seen and the ability to collect and collate information due to weather conditions and the number of people involved.

The main purpose of the first census was to assess the survivability of the Old Irish breed within the generalized feral goat population. The result, across the range of herds seen in disparate parts of the Burren, was consistent with the view that between ten and fifteen percent of the total population was of the Old Irish type. This was the percentage that was consistently found *within* each herd. Goats showing the best Old Irish phenotype were mainly to be found in the older age classes. This was expected to be the case, then confirmed. There was strong evidence of recent and ongoing releases of domestics of dairy type (common) and Boer extraction (one particular herd).

Overall, several distinct types of goat were seen, with graduations in-between. These were:

- A Modern dairy (Swiss) type of obviously recent release.
- A basic type of mainly Swiss breeding that was acclimatized to feral conditions.
- A Burren type that was a blending of the Old Irish with the Modern dairy type. Characteristically, it was thicker to longer coated than the modern type, horned as opposed to polled, larger than the Old Irish, and with a head that was more in keeping with the Swiss type, including larger ears. This type was emerging as a distinct blending.
- A Burren type that was more in keeping with the Old Irish in conformation, coat and size, but with a small and neat head. This type is something of an enigma. The small head may have some reference to the Saanen, although the overall look may indicate an unknown parameter in the type of the Old Irish. There are goats of similar type in Iceland, and the Icelandic breed is supposedly purebred. It belongs to the same breed group (Northern breed

Group) as the Old Irish, which suggests that more work needs to be done to define this type and its origin.

One aspect of the study that was intriguing is that there was an indication that herds would typically grow in size to between one and two hundred animals without splitting to form new herds. It is generally cited that feral goat herds are between fifteen and forty in number, and there have been studies that demonstrate the way in which a small group will hive off from a larger one to form a new home range that then may or may not interconnect to maintain a population in which groups have the opportunity for genetic interchange.

Even whilst the census was taking place, there were rumours of roundups and intended roundups (including the removal of whole herds) that were in some instances confirmed.

Male movement was considered, as this has a bearing on genetic interchange between individual herds. In most cases, the male groups seen were of very mixed type, including goats of very Modern phenotype. However, in one particular area, the males were more uniformly of the old Irish type, even although the nearby female groups were of more mixed composition.

The second census, (details of which are held by the Old Irish Goat Society), largely confirmed that the old Irish component of the herds seen was around twelve percent.

Way forward. A census of the whole Burren feral goat population, covering a wide range of data, is the essential basis for an ongoing management programme.

Information gathered may well give a quick estimate of population increase as a useful tool in implementing an initial management strategy.

Information sought would include:

- Overall numbers and individual herd numbers
- A breakdown of the numbers of males, females and kids
- The proportion of goats of Old Irish type.
- Location of herds, including location of male groups.
- A gathering of information, based on local intelligence, of both general movement (female groups and mixed groups) and male movement (bachelor parties).
- Data gathering again based on local intelligence, of seasonal movement.
- Information gathering on the past and recent past locations of goat herds as a first step towards reintroduction at some time in the future.

Such a census would be different to a behavioural study, dealt with below, as the objective is to fix a picture of the feral goat population in time and space as a first means of working on a management strategy. The important criteria would be universal coverage of the Burren. The information gathered would relate to an overall picture to form a working basis.

There may or may not be funding implications in terms of equipment and people.

(7) Ongoing monitoring

This is considered to be important as any decisions that are made with regard to ongoing management have to be based upon the situation at the time of its implementation. The information gathered would relate to overall numbers within herds, and in particular gender balance, kid survival, figures for age classes etc.

Way forward. Build into the strategy the contingency for workers to be available to access herds in the field and gather the relevant information. Devise a protocol for its analysis.

(8) Behaviour Study

Although to some extent based upon the categories of information gathered in a census, it would be an in-depth study (or studies) that covers the behavioural ecology of the Burren feral goat for the purposes of estimating the carrying capacity on the Burren, how best to utilize them as a resource, and understanding their needs in relation to reducing conflict with local interests.

Way Forward. The following studies could be implemented:

- The behavioural ecology of the Burren feral goat
- Population dynamics
- Population ecology

More focussed studies may include:

- The dynamics of herd size
- Male movement in relation to herds and their impact upon the environment. Allied to this, whether or not the behaviour of males (food preferences; the damage they may cause; their possibly higher profile in some circumstances) results in a disproportionately negative attitude towards the feral goat in general. Thus, is it the sheer size of the female groups and the actual behaviour of male groups that is the problem?
- Needs. Feral goats need shelter, more particularly a dry bed, water, forage and a home range in balance with freedom from predation. Their daily activity and movements may vary seasonally, and relate to shelter and seasonal changes in the available food resources. All this may bring them into conflict with human interests. A study of individual herds in relation to their home range may help in reducing conflict, as the needs of the goats would be better understood. By way of example, a herd located in the Border region between Scotland and England was considered a nuisance by local farmers, but the point of contention was that they needed to move through fields used as sheep pasture to reach their only source of water.

(9) The feral goat as being emblematic of the Burren

This area of the discussion is considered important enough to warrant a separate heading.

No better symbol of the history and way of life based upon the Burren can be found than that of the goat. Today, goats in general have been marginalized, and their place in the development of the community has been largely forgotten. Its reinstatement as being symbolic of Burren life, past and present, would do much to protect the interests of the Burren's feral goat population.

Way Forward. As an integral part of the strategy for '(2) Education and Communication'. There may or may not be funding implications.

A MANAGEMENT STRATEGY FOR THE PRESERVATION OF THE OLD IRISH GOAT OF THE BURREN

Discussions relating to the Old Irish goat were interwoven into the considerations relating to how to preserve and promote the feral goat generally on the Burren. An early conclusion, on which all later discussions were based, was that it was too late to save the breed in situ. The overwhelming number of feral goats on the Burren is of Swiss or mixed type, and introgression has altered the old type to the point that the number of purebred specimens of the breed is reducing year by year. As has been pointed out, the younger age classes are disproportionately of the mixed type, and goats of the old type are increasingly becoming post productive. The focus on preserving the old Irish breed therefore centred upon its removal to safe havens, although its proximity to, and association with, the Burren must not be lost sight of.

The outcomes of the workshop, as they relate more specifically to the Old Irish goat, may be divided into eight areas. In terms of urgency, they are:

- Immediate removal of goats of the old type to a safe haven
- Firmly establishing the Old Irish Goat Society as a recognized association, and centring the task of preservation upon the Old Irish Goat Society
- preservation of the breed in terms of a viable gene bank
- establishing the origin, history and importance of the breed to the Burren in particular and Ireland in general
- working towards rare breed status
- promoting the breed as emblematic of the Burren, including its reintroduction at some point
- Developing the breed as a smallholder's goat
- Using the Burren as a national focus for preserving the Old Irish goat across Ireland

(1) The immediate removal of goats of the old type to a safe haven

The rationale behind this is that it is no longer possible to sustain a population of purebred Old Irish goats of the Burren in a feral state.

Preliminary work with regard to providing a safe haven for goats of the old type has already been undertaken by the Old Irish Goat Society. To date, this has involved the construction of two enclosures in which representative examples of the old breed can be maintained. This pioneering work urgently needs to be expanded, with more sites made available, and more people becoming involved. It may be possible for sympathetic members of the Irish Dairy Goat Producers Association to take young animals, singly or in small groups of two or three. In relation to this, it is imperative that placements are found for males (see 3 below).

The Old Irish Goat Society has made an excellent start in attempting to safeguard a remnant of the breed. However, for their work to be effective, it is necessary for the project to expand along the lines that it has been started, and this requires land and resourcing, particularly for fencing of the right kind. Thus, there is a marked financial implication to progress being made, and this may need funding.

(2) Firmly establishing the Old Irish Goat Society as a recognised association, and centring the task of preservation upon the Old Irish goat Society

The setting up of the Old Irish Goat Society was within the established protocol, although full recognition would require an annual audit of the books. This would be exorbitantly expensive in relation to the size of the society at present and its available resources. Ways therefore need to be found to support the Society in this respect. The workshop was fortunate enough to hear from representatives of the Kerry Bog Pony Society, who emphasised that the preservation and recognition of a rare and endangered breed was very much *dependent* upon the establishment of an accredited society to support it. Full status and recognition of the Old Irish Goat Society is therefore *imperative*.

The Society is pivotal to devising an overall strategy for the preservation of the breed, managing stock and breeding programmes; being involved in publicity, local awareness projects and education; maintaining a herd book, and generally co-ordinating the project to save the breed within the Burren, both short-term and long-term.

(3) Preservation of the breed in terms of a gene bank

Again, this work has been begun by the Old Irish Goat Society, and with a pilot scheme to maintain around thirty goats of the old type in an enclosure that reflects, as much as is possible, feral conditions. There is a need however, to expand this initial enterprise into a tight breeding programme. This would require the maintaining of not less than fifty goats of breeding age, about half of which would be males. To achieve this, males could be kept in bachelor paddocks or singly or twos or threes. There are

implications for moving stock around, and operating a well-coordinated breeding programme.

An interim measure could be to mark males of the Old Irish breed during roundups, re-release them, and then recapture them as necessary. This aspect of the work has been pioneered by the Old Irish Goat Society, which is reflective of their forward thinking in this area.

This is an area of developing the work that needs to be adequately funded. With adequate funding, the breeding programme could be expanded to incorporate a large proportion of the old breed that survives on 'the mountain'.

An important aspect of preserving a gene bank of the breed is the establishing of pure bloodlines. The DNA sampling of goats on the Burren, to establish a DNA profile of the breed, is moving ahead but needs to be coordinated with the work of the Old Irish Goat Society, and may need funding to expand its investigations, particularly in linking up with other studies. For example, DNA profiling could compare goats of the old type across the country, and then seek to compare the results with breeds of similar type elsewhere in Europe. It is believed that the Old Irish goat is very closely related to the landrace breeds of Scandinavia, Iceland, The Netherlands and elsewhere in the British Isles, forming what has been termed the Northern Breed Group. Confirmation of this genetically, in comparison with the other European breed groups, would greatly enhance the status of the old Irish goat.

(4) Establishing the origin, history and importance of the breed to the Burren in particular and Ireland in general

There has been some research into the importance of the Old Irish goat to Irish history in general and the Burren in particular, and this knowledge base needs to be expanded and then used effectively in publicising the breed. Books, booklets, displays in museums, pictures and information at heritage sites and public meetings are a sample of ways in which the old breed can be reinstated in the consciousness of the general Burren population. In relation to this, schools and colleges could become involved with field trips, competitions and population dynamics studies, all of which have been set up in England in relation to the equivalent landrace breed there. This could be coordinated by the Old Irish Goat Society.

(5) Working towards a rare breed status

There needs to be a discussion with regard to the criteria for rare breed status as it affects feral stock. Ireland may hold a different view to the U.K., and both may have different criteria than that recognised by the European Union. What is important is that rare breed status might circumvent the issues around legal status, or lack of, for feral goats. The history of the Kerry Bog pony would certainly suggest that this is an area worth exploring.

Traditionally, specific breeds of livestock have been ignored in agricultural systems. However, the European Union has recently included a series of regulation aimed at

protecting breeds of livestock with a local tradition. How this could be included in rural development plans and the goals of agr-environmental conservation needs to be explored. What is important is that the Old Irish goat of the Burren is most definitely representative of a livestock breed with a local tradition, and should be recognised as such.

Further exploration of the issues of rare breed status, based upon the Irish Rare breeds Society and the recent legislation of the European Union, may well be of significance to the preservation of the breed. With regard to the latter, funding may be available.

(6) Promoting the breed as emblematic of the Burren, including its reintroduction at some point

Although great emphasis has been placed upon the removal of the Old Irish goat from feral herds as key to its preservation, it should be seen merely as the first step to re-establishing it as a discrete feral goat breed in the region.

The process is therefore one of creating a viable gene bank in safe havens, from which stock can be reintroduced into the 'wild' as a tourist attraction with recognition of its historical value. To achieve this, sites would have to be identified where groups of purebred Old Irish goats could be introduced/reintroduced. Such localities would need to be in areas where stock of mixed type could not interbreed with them.

One possibility is linking the 'National Park' with the 'National Goat'. How this concept could be linked up with other areas of work designed to preserve and promote the breed is considered in the next section.

(7) Developing the breed as a smallholders' goat

It must not be lost sight of that the Old Irish goat was traditionally the one and only *domestic* goat breed of Ireland. Although it was superseded by imported breeds that were more productive milk producers, it nevertheless retained a number of qualities that the highly developed dairy goat breeds do not have, and which may be required again in the future. 'Gene bank' in relation to the breed is not therefore a passive term, but implies the storing of genetic qualities that may be useful again in the future.

A good example is the fact that smallholding and self-sufficiency have burgeoned of late. It is therefore possible that a small, hardy, self-sufficient, easy to please breed of goat, that offers just enough milk for household purposes or rural yoghurt making, may come back into fashion. The improved breeds may produce huge quantities of milk by comparison, but in terms of housing, space needed, care, vet's bills and so on, the two-fold question needs to be asked: is all that milk needed, and how cost effective is the production of milk, pint by pint? In some trials, taking all of the foregoing into consideration, it has actually been found to be true that the milk of the humble landrace goat costs less to produce, pint by pint.

Re-establishing the old Irish goat may therefore have some practical value. As important, however, is the need to redomesticate it as an additional means of

preserving it. There is a limit to the number of enclosures that can be established that would allow examples of the breed to maintain an essentially feral existence. In domestication, goats of the breed can be kept in small numbers in restricted areas. There would also be an outlet for them in land management, zoos, parks and so on. Also, living examples could be maintained at heritage sites to show the livestock of the period- living history, in fact. Re-establishing a domestic base for the breed therefore enhances its chances of survival as a breed.

To achieve this aim, it would be necessary for a project to be established that brings a small group of Old Irish goats into full domestication, probably bringing them up as kids, and then working to establish the productivity, unique qualities and cost effectiveness of the breed. This could be a five year project, given funding.

Members of the Old Irish Goat Society have facilities in respect of this. Close by the feral goat enclosure, and opposite the National Park, there is an area of old buildings that could be refitted to act as a goat dairy, including a yard and paddock, to carry out this work. These buildings might also be suitable for establishing a rural life museum, with artefacts and information, as it relates to the importance of the goat, historically, on the Burren. Another member of the Society has sufficient experience and expertise to be involved also in such a project.

A re-domestication project could therefore be seen as a part of a wider one, homed in on tourism, in which visitors could be invited to witness life as was around goatkeeping, visit the enclosure to see the feral goats in situ, have tea based upon goat products, and then track down the Old Irish feral goat herd in the National Park.

In terms of protecting landrace breeds with a local tradition, such a scheme should be fundable through grants.

(8) Using the Burren as a national focus for preserving the Old Irish goat across Ireland

Lastly, some thought was given to the wider implications of the work that can be carried out on the Burren. Feral herds across Ireland are in a similar predicament to those found on the Burren in terms of introgression and persecution. There needs to be a national focus on recognising and preserving feral goats countrywide. Also, the overall number of Old Irish goats across Ireland, although unknown, is likely to be in keeping with the figures for the Burren. The breed, therefore, is in decline nationally, and heading for extinction generally. Ways could therefore be found to use the work to be carried out on the Burren to heighten public and interest group awareness of the plight of the feral goat/Old Irish goat across the country.

When considering the issues that relate specifically to the Old Irish breed, it became clear that support of the Old Irish Goat Society was the pivotal way forward, and that funding was essential for the organization to be effective in their endeavours. Encouragingly, the Society has already implemented many of the ideas put forward, but enhancing these and developing them further is very much a matter of time and financing.

Appendix 1 : Feral Goat Survey of 2004

In order to summarise the findings of this 7 day survey, I have quoted from the Report by S. Goodyer Ph.D. Observations below the quoted sections are my own and do not necessarily represent the views of the author of the report.

-Colin Johnston, January 2010

“Three members of the British Feral Goat Research Group (Shirley Goodyer, Les Goodyer and Raymond Werner) visited the Burren between 5th and 12th August 2004 with the aim of assessing the status of the remaining feral goats following the widespread and extensive culling that had taken place over the previous two years.

“Without exception all the herds observed showed a mixture of goat types and there was no evidence of a pure herd of Old Irish goats. However, it was clear that for all sites (with the exception of the Burren National Park where very few goats were sighted, all of modern type) the herds were based on Old Irish stock with the addition of modern goat breeds and/or cross bred goats with a subsequent intermixing of types. The presence of goats that phenotypically were essentially Swiss type (Saanen/British Saanen and British Alpine in particular) suggests that modern domesticated stock was relatively recently still being added to the population. Without exception all the herds observed showed a mixture of goat types and there was no evidence of a pure herd of Old Irish goats. However, it was clear that for all sites (with the exception of the Burren National Park where very few goats were sighted, all of modern type) the herds were based on Old Irish stock with the addition of modern goat breeds and/or cross bred goats with a subsequent intermixing of types. The presence of goats that phenotypically were essentially Swiss type (Saanen/British Saanen and British Alpine in particular) suggests that modern domesticated stock was relatively recently still being added to the population.

“All the herds assessed showed a large degree of inter-mixing of modern goat breeds with the Old Irish Goat. Between 10 and 15% of the goats observed were phenotypically of Old Irish type. “

Although field observation was done in most areas where herds of goats were known (by local information) to be commonly seen, it was not possible to survey all the herds, let alone all smaller groups. Nevertheless, those participating in the survey were satisfied that the herds surveyed in the report constituted the larger part of the feral goat population (perhaps 60%), and the population over the entire Burren at that time was estimated (without any claim that this figure is definitive) at around 1000.

Subsequent observations over the next 2-3 years tended to suggest that this estimate may have been on the low side.

During the years since the 2004 survey, goat numbers have increased in some areas (for example, the Burren National Park at Mullaghmore, where

few feral goats were seen in 2004, whereas now it is not uncommon to see up to 80 goats in 2 herds), but some larger herds have been removed by rounding up. The overall population of ferals is less certain than ever, and has been made more difficult to estimate by an apparent increased mobility of herds, perhaps due to culling attempts or other human activity. It is probable that there remain around 800-900 feral goats, but this can be only a rough estimate.

Although the overall percentage of Burren feral goats which show Old Irish characteristics has not substantially changed since 2004, (R. Werner, 2009, above) it is true to say that individual animals of "near perfect" Old Irish appearance are somewhat scarcer. This is not surprising since younger animals tend to be noticeably more modern/ crossbred in type. The importance of having an enclosed population of predominately Old Irish goats in the heritage herd is therefore increasing evident.

It must be stated that any discussion of "Old Irish" characteristics to date are based on visible attributes such as build, conformation, coat type etc. It is to be hoped that DNA studies will clarify whether clear genetic markers exist for the native breed. There is no doubt however, that an older type of goat, closer to the breed depicted in 19th century painting and illustration, predominated in the area up to the 60's and 70's. Many local farmers and former goatkeepers affirm that this older type of goat exhibits dietary preferences and behaviour which make it more useful in land management, and less prone to causing nuisance, than goats of mainly Swiss/dairy type. Anecdotal evidence suggests a preference for woodier, coarser vegetation including scrub species, a tendency to spend more time on higher ground, and possibly lower fertility rates (twin births being rarer). Behavioural studies of the present feral goats would be very useful if they established feeding and movement patterns, since this would better allow an assessment of their impact on the landscape. They would be unlikely, however, to show up any differences between the impact of Old Irish type goats and the common mixed-breed Burren goat. *C. Johnston January 2010*