Rural Manx vernacular buildings are not protected by planning policy: an evidence-informed approach reveals inconsistency in policy application and assessment

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Abstract

1. The Isle of Man is a UNESCO Biosphere Reserve, awarded in recognition of the uniqueness of the island's cultural landscapes. As a predominantly rural country (with 80% of land used for agriculture), rural planning policy is a key modifier of Manx cultural landscapes. Manx vernacular farmhouses, cottages, and farm buildings, alongside Manx sod hedges and small field structure, contribute to the 'sense of place'. Current policy only allows for rural development in exceptional circumstances, which includes 'replacement dwellings', a policy mandating the clearance of existing rural development. There has been to date no assessment of the effectiveness of Manx planning policies at protecting built heritage within cultural landscapes.
 2. I created an evidence-based methodology with decision-trees to assess: (a) the completeness of policy implementation; and (b) its influence on decision-making. The method is demonstrated for the 'replacement dwelling' policy for the last 3.5 years. Public records were screened for relevance, with those remaining assigned policy assessment, compliance, and *policy balance* scores.
 3. Of 62 relevant applications, 58 had recommendations contrary to 'replacement dwelling' policy. In total, 50% of the replacement dwelling requirements were assessed by case officers in the applications. In particular, requirements establishing the principle of demolition / redevelopment (including protection for existing historic buildings) were only assessed with 23% completeness, and 14% compliance. 27 applications permitted demolition and replacement of vernacular buildings, including 17 farmhouses. Assessments of historic and architectural merit, required by policy, were uncommon, and only once was a conservation report obtained. The requirements for siting, size, and design of approved replacements were complied with 47% of the time, with 38% of these deemed 'exceptional circumstances'.
 4. The evidence strongly suggests that policy application is inconsistent and incomplete, with the policies assessed here having no relation to the recommendations issued. Policy thus fails to provide protection to the historic buildings. I suggest that the method developed here could be used to overcome subjectivity in policy application, and allow performance tracking of individual policies.
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1. Background

The Isle of Man was designated a UNESCO Biosphere Reserve in 2016, a designation that recognises the importance of its biodiversity and cultural landscapes (Alexander 2017). The UNESCO designation covers the whole land area and territorial waters, demonstrating the global importance of Manx landscapes. Mixed agriculture is the dominant land use of valley, lowland, and coastal areas below the mountain line (Tomlinson et al 2001). The Manx rural (or ‘agricultural’) landscape is a living landscape with unique characteristics: Manx-style hedges (sod banks) as both field divisions and traditional land ownership boundaries (Killip 1978); Manx vernacular farmsteads; wells and springs; and a dense network of hedge-lined lanes (Tutt 2012; Page 2002). Above the mountain line, heather moorland is maintained through sheep grazing (Tomlinson et al 2001). Vernacular farmsteads and cottages are central to Manx cultural landscapes (Figure 1). Farming is small-scale relative to the United Kingdom (Belchem 2001): many vernacular farmsteads remain working farms. Abandoned farmsteads – *tholtans* in Manx Gaelic – are also numerous, with renewed local interest: *tholtans* have been the subject of a recent stamp issue (IOMPO 2016; IOMPO 2018), and BBC Countryfile programme (Isle of Man Government 2017).

Figure 1 Manx landscapes. **A:** agricultural landscape south of Foxdale. **B:** motorbike racing in the Isle of Man TT, passing low Manx sod hedge and vernacular dwellings. **C:** vernacular Manx farmhouse. **D:** vernacular Manx cottage at Niarbyl.

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57 As a crown dependency, the Isle of Man's planning system has been influenced by, but evolved
58 separately from, other systems in the British Isles. Any development in the countryside is strictly
59 controlled through core Government policy in the Isle of Man Strategic Plan (Isle of Man
60 Government 2016). In particular, planning policy protects vernacular dwellings and *tholtans* in the
61 countryside from development that may erode their character and historic interest, or that of their
62 landscape. This includes protection from demolition / replacement, a major avenue of permissible
63 rural development under a 'replacement dwelling' policy. There are limited circumstances within
64 which new development is allowed to occur within the rural landscape, including replacement of
65 existing dwellings with new ones, erection of agricultural workers' accommodation, and matters of
66 national importance. The 'replacement dwelling' policy has the potential to harm the landscape's built
67 environment, as it mandates the demolition of existing rural buildings before the erection of new
68 buildings can take place.

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70 To date, there has been no assessment of the performance of the Manx planning system at promoting
71 and protecting landscape character in line with the Island's UNESCO objectives. There has also been
72 public concern over the performance of the present planning system: in 2015, a petition of redress was
73 presented to the Lieutenant Governor, with the assertion that "*People are not treated equally and it*
74 *[the planning system] is open to abuse and cronyism and is detrimental to the people of the Isle of*
75 *Man*" (Tynwald Select Committee on Planning and Building Control 2016). The petition triggered a
76 Tynwald enquiry into inconsistency within planning policy implementation. This has resulted in a
77 major review and consultation, which is ongoing. There is a requirement for an assessment method of
78 policy implementation to support stakeholders – including land owners, policy-makers, and those
79 given powers to implement policy – in the continuity and adaptation of Manx landscapes to
80 competing pressures. Here, I introduce a method for rapid evidence-based assessment of the
81 performance of the planning system to implement policy, and demonstrate the application of this
82 method to aid refinement of the planning system and planning policy, answering the following
83 questions:

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- 85 1. To what extent is the 'replacement dwelling' policy used as a pathway to development, how
86 is assessment conducted, and what are the outcomes?
- 87 2. Is the implementation of policy complete and consistent? If not, do differences lead to
88 significant effects on outcomes?

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2. Method

I developed an approach that could robustly synthesise information on the performance of planning policy and decision-making, following best practices in environmental evidence synthesis (Cook et al 2017; Pullin and Stewart 2006). For each planning application, a recommendation is given in a Planning Officer report, which also sets out the relevant policy and full policy assessment: these documents form the information units for the analysis, as they document the decision-making process. I created a three-step methodology that was modelled on environmental systematic mapping techniques (Pullin and Stewart 2006). First, individual planning applications were screened using inclusion criteria to determine relevance to the research question. Second, metadata were coded for each included application. Third, each application was processed through a decision tree to determine two scores: (a) a policy completeness score; and (b) a policy compliance score. The policy completeness score represents the quantity of policy requirements that the application was assessed against, but is not reflective of the quality of assessments. The policy compliance score indicates, given the information presented, how compliant was the application to in-force planning policy.

2a. Screening and Inclusion Criteria

Every planning application that was submitted between July 2014 and January 2018 was screened for relevance: this period represents the time since Government documents have been digitally archived. A record of every planning application, including the advertised name, local authority, and date of decision, was retrieved from the Government archive. I screened at three levels:

1. **Advertised Name.** The advertised name describes the proposed works. Any names matching *“replacement dwelling” OR (“demolition” AND “dwelling”)* were included. The second criterion was required, as some applications were described as “demolition of building”, including cases that were demolition of dwellings.
2. **Land Designation.** I excluded applications that were not from rural areas using the land designations given within the assessment of the application. I defined rural as all land excluding residential, proposed residential, private estate, commercial, and mixed-use designations.
3. **Building Use.** I excluded applications that either replaced buildings that were not dwellings, or constructed a replacement that was not a dwelling, as these are not applicable under the replacement dwelling policy.

2b. Characterisation of Assessments

For each included planning application, the Planning Officer’s report was retrieved from the public archive. Within each report, the officer must state all planning policy relevant to an application,

followed by an assessment of this policy. The policy analysis was informed by policies from the Isle of Man Strategic Plan (2007 and 2016 versions) that allow ‘replacement dwellings’ in the countryside, all of which were unchanged between 2007 and 2016, and are outlined in Table 1.

Table 1 Policies controlling ‘replacement dwellings’ in the Manx countryside, from the Isle of Man Strategic Plans 2007 and 2016

Planning Policy	Summary of Function
General Policy 3	States exceptional circumstances under which development in the countryside can occur. This includes an exception for ‘replacement dwellings’, subject to Housing Policies 12 – 14.
Housing Policy 12 (HP12)	Establishes whether the principle of a replacement dwelling is acceptable, subject to assessments of abandonment and historic / architectural interest.
Housing Policy 13 (HP13)	Allows for renovation of abandoned buildings under certain conditions, but reinforces that abandoned buildings may never be replaced under a ‘replacement dwelling’ development.
Housing Policy 14 (HP14)	Controls the size, siting, and design of any replacement dwelling. Includes two exceptional circumstances under which siting and size requirements can be relaxed: (a) the replacement of a building of poor form with one of more traditional character; or (b) an ‘innovative design’ that has no significant landscape impact.
Planning Circular 3/91	Provides a guide to new development in the Manx countryside. Compliance with policies 2 – 7 of this planning circular are a requirement of Housing Policy 14.

For each policy, I identified whether it was deemed relevant to each case, and whether there was any assessment of (non-) compliance. Each application was geolocated using the postcode. The following additional metadata were encoded for each application: description of the buildings to be demolished, the development plan used, case officer, counter-signatory, site visit date, recommendation, decision level, final decision (if by committee), and if in an area of high landscape value. For Housing Policies 12 and 14, I coded data required during the assessment of each policy. For Housing Policy 12, this included: abandonment status, architectural / historic assessment, capability for renovation, structural condition, years of non-residential use, intervening use, and intention or otherwise to abandon. For Housing Policy 14, this included: footprint location, floor area changes, conformance to Planning Circular 3/91 (‘Guidance for New Development in the Countryside’), visual impact assessment, poor form or condition, reuse of materials, and traditional character of the existing and replacement. All fields and their data structure are outlined in *Appendix A*.

To determine if any buildings to be demolished within an application were ‘*vernacular, traditional, or pre-1920s*’, I relied solely on the building description provided in the Planning Officer’s report. I used keyword matching on the extracted description to indicate support for this designation, with the terms: ‘*farmhouse*’, ‘*original*’, ‘*Manx*’, ‘*dates back to the * century*’, ‘*traditional*’, ‘*vernacular*’,

152 'stone'. When these did not match, another term set was applied to determine no support for the
153 designation: 'bungalow', 'chalet', 'modern'. Where there were no matches, and there was no
154 indication of construction date, it was noted that the designation could not be determined from the
155 report.

157 2c. Decision Trees and Assessment Completeness Scores

158 The 'replacement dwelling' policies (Table 1) were coded into a decision tree (see Esmail and
159 Geneletti (2018) for related techniques). The decision tree was implemented in Microsoft Excel to
160 allow the method to be used in a production setting without additional technical overhead. The tree
161 computes directly from the datasheet (described in 2b), and contains five main decisions (Figure 2).
162 For every application, the coded data is processed by the decision tree, resulting in three scores: an
163 overall completeness score, a completeness score for the principle of development, and a
164 completeness score for the nature of the replacement. The decision tree determines the conformity of
165 the development to the policy controlling replacement dwellings in the countryside, which is
166 compared to the planning officer's recommendation. Under certain circumstances, additional
167 decisions may be required: all scores are thus presented as percentages to ensure comparability across
168 applications. Where there was no assessment of a particular requirement, this requirement causes the
169 decision tree to fail.

Figure 2 Decision tree for replacement dwellings, for the 2007 / 2016 Isle of Man Strategic Plans. There are six core assessments required (grey), with three exception cases (white) that can override core concerns where appropriate. Only when all five / six core conditions are met are the policies fulfilled (Housing Policy 12 and Housing Policy 14 of the Strategic Plan, and Planning Circular 3/91).

3. Results

The screening process resulted in 62 applications, 58 of which were recommended for approval. There were 110 applications that met the initial title screening criteria. Removal of urban land designations resulted in 72 applications. Three of these applications were withdrawn and seven were in progress, which totalled 62 remaining applications. I kept two applications that sought to extend the time of permission, as these full application types required another full policy assessment.

In total, 30 existing dwellings were defined as ‘pre-1920s, vernacular, or traditional’ (48%), while 14 (23%) were not described sufficiently in the officer reports to be classified. Of the 58 permitted replacements, Manx vernacular farmhouses were the most common building type to be replaced (Figure 3): 16 Manx vernacular farmhouses, two vernacular cottages, and two vernacular dwellings of unspecified design were recommended for replacement.

Figure 3 Map of planning applications recommended for approval, presented by building design. Circle size indicates the count of applications within a local cluster. Black points indicate where the planning officer report did not describe the building in any detail from which to determine the building's design. The background layer shows the Isle of Man's local government authority boundaries.

Of the 62 cases, the recommendation made in 58 cases by the planning officer was contrary to the ‘replacement dwelling’ policies. One case that complied with policy was recommended for refusal, while 57 cases contrary to policy were recommended for approval.

201 *3a. Establishing the Principle of Development*

202 Overall, requirements establishing the principle of demolition / redevelopment (including protection
203 for existing historic buildings and *tholtans*) were assessed with 23% completeness. The decision tree
204 determined that there was only 14% overall compliance with the policy requirements: only one full
205 application met the requirements.

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207 Assessments of historic and architectural merit of the existing dwelling, as required by policy, were
208 supplied in 17 cases (27%). There were no cases where an independent conservation report was
209 obtained, 16 where the planning officer made an assessment, and one where the planning office's
210 internal conservation officer provided a report.

211
212 I assessed *policy balance* – the relative effectiveness of individual policy requirements in decision-
213 making – by summing the assessed requirements that did not support the final recommendation. I
214 found that, given 37 assessed requirements, 14 breaches were overridden, while zero breaches were
215 upheld, giving a policy balance of -38%. This included permitting demolition of nine dwellings of
216 stated historic / architectural interest.

217
218 *3b. Siting, Size, and Design of Replacements*

219 Overall, requirements for siting, size, and design of replacements were assessed with 86%
220 completeness. The decision tree determined that overall compliance for approved applications was
221 50%. 41 of 53 relevant applications (77%) did not comply with policy, 38 of which (72%) were
222 recommended for approval.

223
224 **Size and Siting.** A replacement must by definition be placed on the existing footprint: 14 cases were
225 not, while 25 were unassessed. Similarly, 43 cases were significantly larger (>50% floor area) than
226 the existing (25%), with median increase of 71% (range = -1.9% - 894.5%).

227
228 **Design.** 14 of the applications (25%) complied with the design-requirements of replacement
229 dwellings (including four 'exceptional circumstance'). There was a lack of assessment of this criteria,
230 with 36 cases (63%) of cases lacking an assessment against current design requirements.

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232 **Exceptions.** The policy allows for exceptional circumstances: I found that 22 applications were
233 'exceptional', or 35% of all applications. Given the total number of exceptions available for use in
234 assessments, 22% (37/171) were used.

3c. Decision-Making Process, and Role of Additional Policies

Overall, 50% of policy requirements in Table 1 were assessed. For these policies, I assessed *policy balance* – the relative effectiveness of individual policy requirements in decision-making: this was net negative at -30% (-51 requirements). There was limited use of other policies from the Strategic Plan: preventative environmental policies were applied in half of cases. All additional policies applied were preventative in nature, dictating circumstances within which development could NOT occur.

There was heterogeneity in the decision-making process. 17 decisions were issued using delegated authority by the Department for Environment, Food, and Agriculture (DEFA), versus 45 taken by an appointed planning committee.

4. Discussion

The Manx 'replacement dwelling' policy had enabled demolition of vernacular buildings at least 20 times. In most cases, there were no conditions to document the buildings before their demolition and redevelopment. The potential loss rate of built heritage through this policy indicates an urgent requirement to introduce additional protections to ensure that existing policy is applied correctly to safeguard rural historic buildings, in the first instance.

4a. Decision-Making Process

The results support the introduction of greater accountability within the decision-making process. Given that policy assessment was only 23% complete when establishing the principle of development, I recommend the introduction of objective 'policy identification' to ensure that all required policy safeguards are included (*see Section 4c*).

Discretion by Decision-Makers. Case officers have a valuable discretionary role in the planning process, allowing for individual circumstance. However, the results show that 58 of 62, or 94%, of rural replacement dwellings were contrary to the current policy controlling this development. There is low accountability for the use of discretionary power by decision-makers, as it requires considerable digging to find the relevant text. Given that I found that there were no 'facilitative' policies included in any of these cases, there was no opportunity for additional policies to 'balance' non-compliance with the policies assessed here. In some cases there were no overriding material circumstances stated, but it was stated that the development conformed with what policies were "*trying to achieve*". In these cases, discretionary powers are apparently being used to override policy because the case officer does not agree with the policy wording. Rather than constrain discretion, I suggest that policy assessment is followed by separate, explicit inclusion of overriding circumstances, to increase transparency within the decision-making process. There should be a common format for expressing which policy

requirements are supported, which are not, and which other considerations were in favour or against the decision.

Value Assessments. The Isle of Man Strategic Plan policies currently state requirements that may require domain-specific knowledge, but crucially there is no framework of delegation to other Government or independent authorities. In the case of 'replacement dwellings', there is a requirement for an assessment of historic / architectural interest. Currently, assessment methods vary between applications, and do not require any external consultation. These processes should be formalised and allow for delegation where appropriate. For example, two objections were submitted for one replacement dwelling, on the grounds of historic interest. One objector was Manx National Heritage (the Manx Museum and National Trust). The case officer, however, disagreed that the existing farmhouse was of historic interest because the Planning Office's Conservation Officer "*confirmed that the building was not of significant interest to warrant registration and that its demolition and replacement would be acceptable*" (#17/00155/B). A policy amendment is thus required to establish protocol for consultation on requirements that may fall outside the expertise of case officers.

4b. Current Protection for Vernacular Farmsteads

There is no overarching strategy for farmstead buildings in the Isle of Man outside the Strategic Plan, nor any historic building maintenance grants. There are no controls on the demolition of vernacular dwellings or other buildings, such as stone barns. Current policies preventing their redevelopment are not being assessed in full, which has allowed redevelopment to be approved in 16 cases for vernacular farmsteads since July 2014. In nearly a quarter of the 'replacement dwelling' cases presented here, the case officer did not describe the design / style of building(s) to be replaced. It is therefore possible that there could be up to an additional 16 cases of redevelopment of vernacular properties, for which no assessment of historic interest or documentation was conducted. This is not the case in neighbouring jurisdictions. In England, for example, Historic England have completed an inventory (English Heritage 2014a) and character assessment (English Heritage 2014b) of vernacular farmsteads, and provide both guidance and up to 80% of funding required for their restoration. In national parks, demolition of vernacular dwellings is prohibited without planning permission. England has a [Historic Building Restoration grant](#), and a National Farmstead Assessment Framework that ensures planning decisions enable sustainable development of farmsteads (Historic England, 2015). There are currently no equivalent Manx policy documents covering rural, unlisted buildings of historic merit, leaving their development reliant on the broader planning framework.

The current main policy document - the Strategic Plan - is precautionary in nature and thus compatible with the aims of UNESCO biosphere reserves. The overarching Strategic Aim sets out a requirement for all planning assessments to use a precautionary approach:

*"To plan for the efficient and effective provision of services and infrastructure and to direct and control development and the use of land to meet the community's needs, having particular regard to the **principles of sustainability** whilst at the same time preserving, protecting, and improving the quality of the environment, having particular regard to our uniquely Manx natural, wildlife, **cultural and built heritage**."* - Strategic Aim (Strategic Plan 2016) [emphasis mine]

This is supported by core objective 3a:

*"To support the **precautionary principle**, which assumes that activity might be damaging unless it can be proved otherwise in respect of development where significant environmental implications are involved."* - Core Objective 3(a) (Strategic Plan 2016) [emphasis mine]

The evidence strongly suggests that a precautionary approach is not being applied for replacement dwellings in the Manx countryside, contrary to core Government policy, leaving these buildings with little to no provision for their sustainable development.

4c. Digital Decision-Making

The current core policy framework - *"The Isle of Man Strategic Plan: Towards a Sustainable Island"* - places emphasis on sustainable development and the precautionary principle. In these elements, it is supportive of the aims of the UNESCO Biosphere Reserve designation. The results presented here, however, demonstrate four key failings that degrade the effectiveness of the Strategic Plan:

1. incomplete assessments,
2. lack of precautionary approach,
3. lack of policy alignment, and
4. lack of consultation outside of Planning.

It is likely that these failings occur for development other than rural redevelopment, as they all relate to a common procedure. All four failings could be negated through the adoption of more transparent and open decision-making process, improving accountability, rigour, and traceability. The decision-

tree approach could provide a foundation for such an approach, if applied to all policies. An online tool – for use by both the public and decision-makers – could address the above four failings by providing a more open, transparent, and objective decision-making framework.

First, given a particular development proposal, the development works could be defined allowing policy to be filtered by topic. If combined with Government's geo-temporal datasets, this could also be filtered by location-specific factors (e.g. next to a watercourse, or an ancient monument), identifying all relevant policy. Second, each preventative policy would fail by default, until evidence is provided to the contrary. Third, each preventative policy requirement could only be passed with explicit support. A space would be provided for overriding of policy through a case officer's discretion, but importantly this would be separated to quantify policy effectiveness. Fourth, the online tool could identify objectively when external consultation or assessment of a particular requirement is needed, reducing the heterogeneity of assessment methods seen above for 'replacement dwellings', while managing expectations of applicants in terms of decision complexity and time.

5. Summary

Within UNESCO biosphere reserves, there is a requirement for precautionary approach to new development, to support aims for maximisation of biodiversity and cultural heritage. For the Isle of Man UNESCO biosphere reserve, I demonstrate that, despite planning policy documents based on the principles of sustainable development, the current planning procedure has allowed the loss of vernacular cottages and farmsteads. The evidence-informed approach led to the identification of four key failings: incomplete assessment, lack of precaution, use of discretion over policy, and lack of inclusion of domain-specific expertise. Policy application is inconsistent and incomplete, with policy having no relation to the recommendations issued. I suggest that the evidence-informed methodology may developed here be deployed in practice to monitor the performance of the Manx planning system, while increasing accountability and public confidence in the decision-making process. Without significant modifications, the evidence suggests that rural farmsteads will continue to be lost despite policy protections that are already in place. Development procedures should be aligned with the precautionary principle, without which precautionary policies are ineffective.

The findings of this paper can be explored online using an evidence visualisation tool:

<https://oxlel.github.io/evidencemaps/iom-replacement-dwellings/>.

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