

Future of the Huts Working Group

Report to the May 2018 Huts Sub-Committee

Introduction & Background

At the May 2016 Huts Sub-Committee it was decided that the future operation and development of the huts should be the focus of a working group. I was asked to chair the group with a commitment to deliver a report, initially to the May 2017 Huts Subcommittee meeting. After the consideration of the May 2017 report, the Committee agreed that the working group should continue for at least another year and deliver a report to the May 2018 Huts Subcommittee.

Members of the working group. Over the course of two years the following club members have joined (and in two cases left) the working group at different times and in different capacities.

Richard Tolley (Chair), Paul Exley, Ron Kenyon, Keith Wright, Angela Mellor, Joyce Evans, Ian Grace, Humphrey Johnson, David Wilkinson, Hatty Harris, John Moore, Pam Shawcross, John Pulford, Graham Gill, Alan Strachan and Max Biden.

The content of this report demonstrates the huge amount of work that has taken place over the last two years. I would like to thank everyone involved with the working group for their extremely valuable efforts.

The Terms of Reference

At the first meeting in July 2016 the group agreed that we would be attempting to define the club's requirements for the development and operation of the huts over the next 10 years. These requirements would fall under the following headings:

- Accommodation
- Energy use / heating
- Car parking
- Hut bookings
- Usage / meets / marketing
- Communications
-

The group also wished to be clear that we would not be considering whether the club should be acquiring new huts or getting rid of any huts. Our only focus was to be a review of existing huts and the way they operate with a view forward over 10 years.

Research

The working group considered that it was essential to seek the opinions of club members before making recommendations about the future of the huts. We agreed to undertake a survey of members' opinions about the huts with questions covering a wide range of topics. The survey was distributed using the E- Newsletter, Website and Chronicle. It was available from mid-August 2016 and by early January 2017 150 replies had been received. This level of response was seen as a satisfactory representation of the views of the active hut users in the club. In a separate questionnaire the views of all the hut wardens and deputies were also obtained. Finally the views of Hut Secretaries from other major clubs on their hut operations were sought. The clubs consulted were – The Climbers Club; The BMC; The Karabiner Club; The SMC and The Midland Association of Mountaineers.

The results of all these surveys have been taken into consideration throughout the ongoing discussions of the group.

The two points below were minuted at one of the earliest meetings of the Future of the Huts Working Group in 2016. They are the basis on which the following reports were formulated.

- Ground Rule: The huts work as well as they do because of the remarkable degree of cooperation, generosity and friendliness between members (including wardens). We need to be wary of changes that might undermine these qualities, which we tend to take for granted.
- Assumptions:
 - The huts exist to facilitate members' access to and enjoyment of the hills.
 - Hut fees are expected to remain low.
 - Heaviest use is likely to be by retired members and their guests.
 - Wardens will continue to be volunteers and non-resident, and should not have unessential extra work pressed upon them. They are not responsible for promoting hut usage.

At the May 2017 Hut Subcommittee and Club Committee it was agreed that two sub groups would be formed, working on key topics, reporting to the main group. The sub-groups are –

a) **Hut Usage and Hut Finance**

Initially chaired by Humphrey Johnson, Hatty Harris took over as chair in November 2017. The sub group consists of Hatty (Chair) David Wilkinson, Ron Kenyon, John Pulford, Ron Kenyon, Pam Shawcross and Alan Strachan

The terms of reference for this group are stated in Hut Usage and Finance section of this report.

b) Heating and Technology

Chaired by Paul Exley with Ian Grace, Keith Wright, Angela Mellor, Graham Gill. The terms of reference for the group are -

- To produce a survey on a hut by hut basis with recommendations for improving heating and energy efficiency to preserve the fabric of our huts and improve the comfort of members using them.
- Explore the introduction of Wi-Fi with the potential to control heating, for emergency use and for the personal use of members.

Reports to the Huts Sub-committee

The reports from the subgroups are contained further down this main report. **I suggest that they should be considered in detail before the committee meetings.**

The Hut Usage and Finance group make it very clear that they are not making recommendations – they offer a number of options for the committee to consider and act on if they consider them appropriate.

Hatty has produced an Executive Summary to accompany the main report.

The Heating and Technology report does suggest a clear course of action with an option on implementation.

Continuity beyond May 2018. If the Committee decides to implement any of the actions or ideas outlined in these reports there will need to be some monitoring of the implementation. There may also be actions deferred for the moment that might require consideration in the future. I would ask the Committee to consider extending the operation of the working group or elements of the group, initially to November 2018.

Richard Tolley April 2018

Huts Usage and Finance sub-group report - Hatty Harris

Executive Summary

- Numerical analysis of 'bed nights' shows that **occupancy of FRCC huts by members, guests has fallen by up to 28% since 2011**. The analysis is based on bed-night occupancy numbers derived from financial accounts. Current hut usage based on bed numbers and 365 day availability, shows that last year, bed occupancy of individual FRCC huts ranged between 14.7% and 5.5%.
- **The decrease in numbers of people using the huts has been masked by successive increases in hut fees** over the same period. Hut fees have increased faster than costs and in consequence, income has masked decreasing occupancy. The factual information on which the report is based is summarised in **Appendices 1-3**. If present trends continue, it is probably unsustainable to compensate for falling bed nights by hut fee increases over the next ten years.
- **Maximum bed use (100%) is technically possible every day of the year for huts on mains sewerage. Practical maximum occupancy of huts with septic tanks is limited by the capacity of the sewage system and is significantly less than the hypothetical maximum based on bed numbers.**
- **Members' opinions, derived from responses to the questionnaire have been used to propose an acceptable model for annual hut occupancy (Appendix 4).** This matches members' preferences as expressed in questionnaire responses. The model is based on Salving House which is on mains sewerage and therefore has total bed numbers continuously available. The model demonstrates how use by individual members, guests, kindred clubs and guest club groups could be managed to achieve financially sustainable occupancy. It would be possible to construct a similar model for each hut separately, making allowance for the practical reduction in capacity imposed by septic tank sewage systems and allowing for the variation in popularity of different properties.
- **Actions which the sub-committee might wish to consider to stimulate hut use are listed in the Report item 6.** These are grouped into those which can be instigated on the authority of the committee, those which would require change to current bye-laws and those which would require AGM sanction and changes to Club Rules.
- **Access practices of a selection of other clubs to their properties, for non-members as individuals and groups are listed in Appendix 5.** FRCC committee could choose to adopt one or more of the practices of other clubs. Some clubs operate their properties on a semi-commercial basis to provide net income (profit) to the club. No opinion

was expressed in the responses to the questionnaire to suggest there is any support among FRCC members for managing our huts in any way as a commercial venture.

- **Appendix 6 is a summary of the FRCC rules and bye-laws** which govern access to our huts by groups i.e. members' guests, kindred club groups and guest club groups chaperoned by an FRCC member.
- **The report makes no specific recommendations.** It focuses on identifying options available to the Huts Sub-Committee and Main Committee for them to consider when prioritising actions and making decisions. We are of the view, however, that there is a strong case for future year by year monitoring of hut bed occupancy.

Huts Usage and Finance sub-group main report - Hatty Harris

The 'Huts Usage and Finance' team is a sub-group of the 'Future of the Huts Working Group' (FOTHWG).

The Team: Hatty Harris (Chair), John Pulford (FRCC Treasurer), John Moore, Ron Kenyon, Dave Wilkinson, Alan Strachan and Pam Shawcross is tasked with submission of a report to the full FOTHWG group at a meeting in February, 2018. The final reports of the two FOTHWG sub-groups will be submitted before mid-April, to the Hon Sec for the attention of the Huts Sub-committee and main committee.

There are concerns about decreasing hut use and fluctuating income during the last decade. As a result it was decided to seek members' opinions on our huts and their future and a questionnaire was prepared. FOTHWG's investigations and deliberations are in part consequences of members' responses to the questionnaire.

1. Background

The two points below were minuted at one of the earliest meetings of the Future of the Huts Working Group in 2016. They are the basis on which the following report was formulated.

- Ground Rule: The huts work as well as they do because of the remarkable degree of cooperation, generosity and friendliness between members (including wardens). We need to be wary of changes that might undermine these qualities, which we tend to take for granted.
- Assumptions:
The huts exist to facilitate members' access to and enjoyment of the hills. Hut fees are expected to remain low. Heaviest use is likely to be by retired members and their guests. Wardens will continue to be

volunteers and non-resident, and should not have unessential extra work pressed upon them. They are not responsible for promoting hut usage.

The following points are relevant to the activities of FOTHWG in relation to analysis of occupancy and economics of Club huts.

- FOTHWG was created as a fact finding body.
- FOTHWG has no reporting brief other than to the Secretary for the attention of Huts Sub-committee and Club Committee.
- The FOTHWG 'huts use and finance' teams' terms of reference derive in part from members' responses to the Huts questionnaire 2016 in addition to the Committee brief.
- It might help to allay concerns if the Committee were to re-assure members that the FOTHWG review is not a disruptive or revolutionary activity.

2. Terms of Reference

- To investigate ways in which hut use might be stimulated.
- To investigate the 'pros and cons' of increased hut usage.
- To investigate and report on how other clubs use their huts.
- To evaluate how our huts can be made more attractive to members and more efficient economically.

3. Causes for Concern in the Present Situation.

- Current percentage occupancy of huts (together with cottages where relevant) is 5.5 – 14.7% calculated on total bed numbers and a 365 day year (Appendix 1).
- Hut income is decreasing in real terms (Appendix 2).
- Increases in hut fees have not produced consistent income increase over the last few years. This implies that bed night numbers have decreased (Appendix 3). If this continues it means that hut income will decline to uneconomic levels in the foreseeable future. Some action is therefore needed to sustain the huts financially in the long term. Repeated hut fee increases will become counterproductive.
- Complaints from members, including the huts questionnaire responses, indicate that unsatisfactory hut facilities, particularly heating, may be discouraging hut use.
- The majority of hut users are retired (older) members. The current membership profile shows 68.5% over 60 and 88.6% over 50. Of the 150 questionnaire respondents, 97 (61%) were over 60. The only group of members available to boost hut use significantly are the over 50s.

- A decline in huts usage has implications for the value of the huts as a focus of Club social life, as well as for facilitating outdoor mountain activities for members.

4. Consequences of increased hut occupancy levels.

Pros.

- Increased income
- Sustainability of hut finances in medium term (about 5 years) to long term (about 10 years).
- Improved security and hut condition (by keeping properties drier and warmer).

Cons.

- The questionnaire indicated that members prefer lightly-occupied huts: 42% of respondents preferred <25% full, 48% 25-50% full, 6% over 50%.
- More meets would not be popular: 10% questionnaire respondents were for more meets, 73% did not want more meets.
- High level of occupancy causes pressure on services. e.g. septic tanks, electricity supplies, water supplies, washing facilities, car parking etc. The '3rd storey' bunks are effectively 'overflow accommodation'.
- Single person occupancy is marginal economically.

5. Increasing Occupancy: Practical steps.

- Decide realistic practical targets for satisfactory hut occupancy: *Committee decision.*
- Increasing hut occupancy to 14 or 15% across huts, and maintaining it, would significantly improve hut finances. A hypothetical model for annual usage of one hut (Salving House) as shown in Appendix 4, supports the feasibility of this target.
- Closer monitoring of hut usage. Recording of numbers/classes of users (from hut registers) would allow easier identification of occupancy problems as they develop. (Increased hut fees can mask decreases in bed night numbers).
- A systematic approach to hut-based meet planning. Meets Sec with wardens to prepare annual plans, including a meets programme of organised events (e.g. FRCC and group meets) at each hut.
- Monitor take up of hut-based meets.
- Stimulating increased hut use to 2004-2011 levels would be a satisfactory financial 'buffer' for the huts budget in the medium term.

6. Possible Committee Actions to Stimulate Increased Hut Occupancy.

- Construct a 'usage model' for each hut (Appendix 4): (action Meets Sec, wardens, et al)
- Adopt one or more of the possible actions to stimulate hut usage as listed below.
- Adopt one or more of the recommendations of the Technology team.
- Monitor hut usage over several years to inform on future trends in usage, including indications of the efficacy of any actions taken (wardens, Huts Sec, Treasurer).

Short term actions (1 year): (see report of FOTHWG May 2017): Actions not requiring bye-law changes might *at the discretion of the* Committee be implemented as soon as convenient:

1. Use the E-Newsletter, website and Chronicle to advertise and promote meets more actively. Include more meet info on the website meet description section. Provide details of meet vacancies on a monthly basis.
2. Maximise cottage availability info on website home page (e.g. with link to booking page).
3. More themed meets.
4. Actively encourage members to bring groups from BMC affiliated clubs of which they are members to Cottages and Huts (available to book currently up to 50% beds).
5. Actively encourage kindred clubs to hold more meets in FRCC huts.
6. Review the current strategy for adopting more clubs as kindred clubs.
7. Promote more group use of huts by members' families and personal friends (with prior agreement of hut warden) (appendix 6)

Medium term actions (1 through 5+ years): *At discretion of Committee* involving modification of current bye-laws.

1. A review of Hut Bye-Laws generally to allow a larger proportion of huts to be booked by members (bye-law 2b), kindred clubs (3(A)e), and members accompanying non-kindred clubs (3Bc) and reconsider the amount of deposit required (3(B)d).
2. Consideration could also be given to increasing the number of meets by a guest club in any one year: e.g. from one per year, to one per hut per year (3(B)j).
3. Increase the current limit of two bookings per year per member on cottages (7h).

4. Increase length of maximum booking of cottages outside peak times: e.g. from one week to two (or 11 nights from Monday – Friday including one week-end).
5. Increase hut fees for members and/or guests (5d). NB This could compensate for declining usage, but without providing long term sustainability.

Long term actions (5 - 10 years): A further substantial decline in usage (bednights) (say >15%) might prompt actions requiring AGM sanction.

1. Changes to membership policy to increase club membership.
2. Developing suitable parts of some properties for commercial letting in order to create an income stream to sustain all of the properties financially (as, for example, per NLMC in appendix 5).

NB Disadvantages of wider access to huts (insurance issues/ extra work for wardens).

Experience has shown that guest clubs do not always maintain the standards of behaviour and housekeeping expected by FRCC members.

7. Acknowledgements

The wardens for support and information.

Members who responded to the questionnaire for the information which provided the terms of reference for FOTHWG.

Appendices to Huts Usage and Finance sub-group report

Appendix 1. Huts Occupancy 2016 and 2017

% total beds occupied in a 365-day year for individual huts. Cottages included in the data.

The number of beds occupied ('bednights') are estimated from actual income

assuming 75% of beds are taken by members and 25% by guests.

Data from the Treasurer, for financial years ending 30.6.16 and 30.6.17.

	2015/16	2016/17
Beetham	10.2	12.8
Birkness	12	13.9
B'close	7.2	5.5
Rawhead	12.6	13.2
Salving House	10.2	14.7
Karn House	10.7	12.5
Waters	5.6	7.4

Appendix 2. Change in Hut Income since 2009

1	2	3	4	5
year	members' Fee £	Income, Actual	income uplifted	income %
2009	3.5	55300	94800	100
2010	3.5	54818	93974	99.1
2011	3.5	49701	85202	89.9
2012	4.0	47267	75627	79.8
2013	4.0	54094	81141	85.6
2014	5.0	55376	73835	77.9
2015	6.0	67744	73903	78.0
2016	6.0	59454	59454	62.7
2017	6.0	67694	67694	71.4

Column 3: actual hut income for financial years ending June 30th.

Column 4: annual hut income uplifted to the £6 hut fee for comparability between years and adjusted to reflect hut fee increases from January 1st in the relevant years.

Column 5: uplifted income of column 4 as % of 2009 value.

Data from the Treasurer

Appendix 3. Changes in bednights since 2012

(a) Calculation of average bednights, 2004-11

Year	bed nights
2004	10950
2005	11760
2006	12197
2007	12015
2008	10886
2009	12626
2010	12530
2011	11360
<u>Total</u>	94324
<u>average</u>	11790

(b) Calculation of bednights from 2012 as % of 2004-11 average.

Year	Members Fee	Guest Fee	Bed- nights	Bednights %
Average			11790	100
2012	4.0	8.0	9453	80
2013	4.0	8.0	10819	92
2014	5.0	9.0	9229	78
2015	6.0	10.0	9678	82
2016	6.0	10.0	8493	72
2017	6.0	10.0	9671	82

Column 5: Bednights as a % of the average for 2004-11 as shown in (a).

'Bed nights', calculated as in Appendix 1, are estimated from actual income (Appendix 2 column 3).

Appendix 4. A Hypothetical 'Usage Model' for Acceptable Hut Occupancy: The Salving House

- The Salving House 'acceptable occupancy' may reasonably be calculated using bed occupancy, without the need to consider the capacity of a septic tank, because this hut is on mains drainage.
- 14 men 10 women, 24 beds total. 365x24 bed nights a year full capacity = 8,760 bed nights.
- 6 meets: say 90% bed occupancy = 259 bed nights.
- Suppose average 6 people (3 couples/climbing partners) over the remaining 46 weekends (a comfortable number for the facilities: adequate car parking and can all cook, eat and sit by the fire at once), 552 nights.

- Occupancy over the year would then be $(259+552)/8760 = 9.3\%$.
- Thus 9- 10% bed occupancy over the year represents the Salving House serving the members comfortably within the limits of its facilities. All but meets weekends might be at the 25% or less occupancy preferred by members.
- Occupancy could rise to 15% with take-up of an average of about another 552 bed nights a year. There is plenty of scope for more groups midweek (FRCC or Kindred Club-member led, Appendix 6) and an increased occupancy to 50% (say) some weekends. This could be achieved with very little evident change for those choosing to stay at huts < 25% full i.e. without overcrowding, if they use the online booking to select their dates carefully. *(This hypothetical model was devised on the basis of Salving House facilities; the actual data (Appendix 1) are coincidentally similar).*

Appendix 5. Examples of other clubs' access policies for non-members.

Outside letting practice for non-member groups

- Entire hut bookable any available date for BMC affiliated clubs & other groups, schools, Duke of Edinburgh, armed forces etc.
- Entire hut bookable any available date for BMC affiliated groups only.
- Fixed numbers of beds available for outside booking. Some places reserved for members
- Entire hut bookable weekdays for BMC affiliated and other groups. Members' spaces retained at week-ends.
- Selected rooms/ dates available for outside group bookings.
- Rooms bookable by members for private mixed groups.

Climbers Club (CC) 8 properties.

Booking of certain rooms by members for group use permitted.

Outside group bookings : bed totals and dates vary from hut to hut (individual beds numbered). Reserved members' rooms.

Two outside bookings only per month for any property.

North London MC (NLMC) 2 properties 200m apart.

One property ('The Barn') used almost exclusively for outside groups as commercial revenue earner.

Second property members and guests only (Cottage).

Wayfarers MC (WMC) 1 property

24 places available for outside lets in hut and annex (12 men only/ 12 mixed). 6 places in hut reserved for members (male only).

Karabiner MC (KMC) 1 property

23 places (3 rooms) available mid-week, 17 places (2 rooms) week-ends. 1 or 2 rooms reserved for members.

ABMSAC/Alpine Club (ABMSAC/AC) 1 property

Mainly used for outside lets. Some beds reserved for members (2 ABSAC/AC club meets annually).

Midland Assoc of Mountaineers (MAM). 4 properties.

Booking rules very similar to FRCC. No outside bookings without an MAM member present except with kindred clubs.

Rucksack Club (RC) 3 properties.

- a. 2 properties (Two members' rooms with six beds each), 11 & 21 beds available for outside booking (BMC affiliated clubs).
- b. 1 property members, guests and kindred clubs.

Yorkshire MC. 1 property

Self-contained section for members and guests only. Remainder of property may be let to outside groups.

Cleveland MC (CMC) 1 property.

12 places available for BMC affiliated club groups when hut not required for CMC meets. A separate room is kept available for CMC members.

University of London Graduate MC (ULGMC) 2 properties.

Two properties leased for months at a time e.g. school DEA groups. ULGMC has in effect become a property letting trust.

Members cannot access their own club hut for much of the year and club membership has collapsed to c.120 (representing graduates and current students in a university with more than 100k students per annum).

ULGMC illustrates the consequences of uncontrolled non-member lets.

Notes

Some clubs (e.g. CC, Cleveland and Wayfarers) *must* offer access to outside groups in consequence of funding grants.

Some clubs permit outside lets to non-BMC affiliated clubs e.g. universities, schools etc). CC has excluded university groups from all except one hut because of student group (young people) bad behaviour .

NLMC allows access for student groups from University College, London MC to the Barn, once per year under supervision from NLMC members in the Cottage as a membership promotion joint meet. It works and NLMC recruits UCL graduates as members (the ULGMC see above does not).

FRCC hut rules could be modified to allow exclusive use of certain dorms for private members and guests including mixed sex groups e.g. Beetham (either male or four bed room, Birkness (small male dorm), Waters Cottage (CDB).

Larger FRCC dorms could be partitioned to allow similar arrangements in other huts (e.g. Brackenclose and Raw Head).

Beware : Frequent lets to large non-member groups can lead to decreased use of huts by members.

Appendix 6. Abridged summary of Bye-laws and Rules relating to group visits to FRCC property

Access to FRCC Huts is covered by Club Huts and Cottages Bye-Laws (2016) and Rule 13 (Temporary Membership).

Current FRCC Rules and Bye-Laws provide several ways in which a group can stay in an FRCC hut and/or cottage. Up to 50% of hut bed spaces can be booked for a non-FRCC group's use. Cottages can be booked in their entirety for group use.

1. Members of kindred clubs (currently 15) can book and stay in FRCC property as a group without an FRCC member chaperone. The accommodation allowance is half the hut bed spaces. Rule 13 (ii) permits kindred clubs to conduct a joint meet with a guests from a third club of the kindred club's choice but the 50% bed allocation then applies to the combined total visiting group (Byelaw 3e).
2. FRCC members can introduce personal guests in numbers up to 50% of bed spaces in a hut with specific permission of the warden (Club Huts and Cottages Bye-laws 2b)
3. A non-kindred club 'guest club' group that is a mountaineering club affiliated to the BMC, may use a hut only with a full FRCC member, who is also a member of the 'guest club', present as sponsor throughout the visit. A guest club visit is not a joint meet with FRCC. Half the beds in a hut is the maximum permitted for a group of this type 3(B)c. Guest club group visits are restricted to one meet per year for a specific club (3(B)j).
4. Cottages. Guest groups may stay in FRCC cottages for periods up to one week, provided that a Full FRCC member is present throughout the stay and takes responsibility for the guests (Club Huts and Cottages Bye-laws 7).

For a full explanation of conditions see current FRCC Handbook (Huts and Cottages Bye-laws November 2017).

NB There is no provision in FRCC Rules and Byelaws for a non-kindred club to take part in a 'joint meet' with FRCC in FRCC property.

The FRCC Committee (Hut and Cottage Bye-laws) alone have the authority to modify cottage and hut bye-laws. Any rule changes have to be approved at a Club AGM and the FCA have to be informed.

Members of the Huts Usage and Finance Team

Hatty Harris (Chair), Pam Shawcross, John Moore, John Pulford, Ron Kenyon, Dave Wilkinson, Alan Strachan)

And Max Biden as observer

16 Jan 2018/23 Feb 2018/2 Mar 2018/5 Mar 2018

Heating and Technology sub-group report – Paul Exley

Introduction. The Heating and Technology group was set up to consider the best means of heating the huts and the technology that might be useful in this and in other aspects of the huts' future. We were also charged with finding a cheaper supplier of electricity as our then supplier, SSE, was to impose a 13% price increase.

Overview. We started by listing and considering all the possible energy sources for heating the huts. Then we selected the most appropriate of these and developed specifications for using these fuels. We asked several contractors to quote against these specifications. This report includes details of the outline prices given to us. We also considered communications and obtained information and prices for internet delivery both by land line and by satellite. We have looked at insulation briefly but more work needs to be done on that issue.

Alternative supplier of electricity for all huts. We collected data on the usage of electricity at all the huts, both during daytime use and (where appropriate) during the night-time hours of cheaper unit cost. This was done, for each hut, for two separate 12-months periods and averaged. The results were sent to a government website, Uswitch, which analysed our figures and recommended Opus. This company offered prices that would be only 3% higher than the SSE price before its 13% increase. We went ahead and signed up with Opus.

Fuels and our views on them.

1. Gas or oil. These were considered together as being suitable and similar in that they would both need to have tanks installed, both would need a boiler and a network of radiators and pipes. They could both be controlled remotely e.g. via the internet.

2. Electricity. This is currently used for storage heaters. We wrote a specification which stated the performance objectives for the system rather than specifying the equipment to be used. We stated that we needed to be able to control the heaters remotely e.g. via the internet.

3. Coal and/or wood.

a) Open fires. These exist in all huts except Karn House which has oil-fired central heating. We expect that there would be huge pressure from members to retain these from a social, focal-point aspect as well as their (fairly

inefficient) value as a heat source. We have supposed that they would be retained and used as a top-up for any other heating system.

b) Enclosed fires. The club has an unsatisfactory history of the use of these types of heater. A few members (but significant numbers) are unable to follow instructions about the use of these fires. We decided against proposing what we knew would be a maintenance problem even though these fires use fuel much more efficiently than open fires.

4. Renewable. It would be satisfying to use renewable energy to heat the huts but it was considered impractical and/ or uneconomic. The cost of installation for systems such as solar cells, windmills, heat pumps and hydro would be very high and the return very low. In some cases siting the equipment would be very difficult and planning permission could be an issue. Some would have on-going maintenance needs.

Approach.

We decided that, at this stage, we shouldn't seek prices for all types of heating at all huts but should select two that were, broadly, representative of all. Because of their differing sizes and types of building, as well as their closeness to each other for contractors' travel, we chose to look at Beetham Cottage and both of the Raw Head buildings. We considered that we could interpolate or extrapolate other huts' costs from these.

We wrote specifications for the performance of heating systems using gas/oil and using electricity as fuels. Then we invited contractors to visit the two properties with us with a view to giving us recommendations for equipment as well as prices for supplying, installing and commissioning the systems. We asked them to remove redundant equipment. In both cases we made it clear that FRCC would be responsible for making the internet available in the premises.

Quotations.

It must be stressed that the quotations obtained so far may only be considered as preliminary. This is because, if we decide to go ahead, we would need to meet the selected contractor on site to discuss several aspects of the quotations. These may result in increases or decreases in the scope of works and, therefore, the cost. However, with that caveat, the prices we have so far are:-

	Beetham Cottage	Raw Head Barn	Raw Head Cottage	Notes
Electrical 1	£5,715	£6,394	£6,586	Rubbish removed from building but not site.
Electrical 2	£5,857	£9,290	£5,788	Includes rubbish removal and 3 Smart Boxes and comms connection per building
Oil / gas 1	£15,414	£15,470	£13,011	Extra £600 for electrical work at Beetham and similar amounts for the Raw Head buildings. There is no allowance for supplying the base for the oil or gas storage tank. An allowance of £3,500 should be made for Raw Head and £2,000 for Beetham Cottage. These installations are not internet enabled.
Oil / gas 2	See below			

These prices all exclude VAT which we will have to pay, and then reclaim from HMRC.

Oil / gas 2. Because of the huge disparity between the supply and install prices for electrical heating and for gas or oil heating, no further quotations are currently being sought for oil / gas installations. Even though the fuel cost for oil or gas might well be cheaper than for electric heating, it would take many years to break even (if we ever did). Also, there would be a higher maintenance cost for gas or oil as well as considerable disruption in the installation period.

Electrical

Both contractors have offered heaters that remain active all day rather than the current type of storage heaters that charge up overnight. This has the advantage of lower power heaters that are on when people are in the rooms rather than being on at night.

Control

As noted above, the quotation for oil / gas installation does not include for interfacing with or control by the internet. Both electrical quotations include for control via the internet but not, of course, for the provision of internet for which separate prices are given. The contractor Electrical 2 has offered heaters that have built-in movement detectors. These are used to increase

the temperature set point when people are present and decrease it again when no presence has been detected for a period of 30 minutes. For example, we could have the background, economy temperature (range 10° - 18°) set to, say, 14° but automatically increase this within the comfort temperature range (18° - 25°), say, 20° when people are detected. This would have the advantage of using power only when people are there and would not use energy when people were in bed, out on the hill or have gone home.

These heaters have an anti-freeze setting of 7° which would be used to avoid any freezing.

These heaters could operate on a stand-alone basis but could also be controlled and monitored by internet. This would mean that internet would not be essential for heating control but could be used for that purpose as well as for monitoring and the other uses mentioned below.

The keypads on these heaters are lockable to prevent unauthorised tampering.

Less sophisticated heaters could be used in dormitories. These could maintain a fixed temperature and would cost appreciably less to buy.

Running costs

Figures from the heaters manufacturer indicate that the power used would be between one third and one quarter of the power used by storage heaters (although some would be at a higher cost/kWh) with a payback time of about four years, taking into account the cost of buying and installing the heaters.

Insulation.

None of the contractors made any formal comment about insulation. However, it's clear that the buildings concerned, because of their age, will have no cavity wall insulation. Indeed, they may well not have cavities. We should consider whether, and if so to what extent, we should insulate outside walls. Although this would attract additional cost, it would clearly also produce long-term benefits in comfort and reduced energy bills. As a very rough guide, I asked a member who is a joiner about the end (east) wall at Raw Head Barn - that's the one with the four climbing photos and a window. He estimated the material costs as £180 but that excluded skimming the plasterboard. It will be worth looking at this properly if we decide to go ahead.

Internet.

The heating systems considered will require a good internet connection and

WiFi to enable them to be remotely monitored and controlled. Such systems could also be linked to security alarms or cameras in the future if we wished. Furthermore, a majority of our members returning questionnaires said that they would like to have WIFI internet connection in our huts so it seems reasonable to allow hut users access to WiFi in at least one hut on a trial basis.

The installation costs of internet depend on the means of delivery. The initial cost of satellite is likely to be higher than land line but the monthly costs may be comparable, depending on the data rate that we choose. Our guess is that the data rates for uploading and downloading will be very low if we use the connection only for control and monitoring of the heaters. However, if we allow hut users to access the internet, then undoubtedly the data rates used, and therefore the monthly costs, will be higher.

The current costs for internet delivery are approximately those given below:-

	Initial (installation) cost	Monthly cost	Notes
Land line	£133.50	£23.90	Increases to £28.90/month after 2yrs
Satellite	£475	£22.50	Based on 10GB monthly quota

The way forward.

An approach to this heating issue would be to go ahead with one hut; we would suggest Beetham Cottage. To insulate outside walls if we think that's the thing to do and install an internet connection and WiFi router. Once a heating system is installed and commissioned, then we would monitor it for at least one winter to gauge the reactions of the users of the hut and to monitor the fuel usage. After that, we would decide whether to install similar systems in other huts or how to proceed otherwise.

With the prices received so far, a clear favourite would be electric heating. This would use wall-mounted panel heaters which would be active 24 hours a day. Temperatures would be set during commissioning or remotely by internet. There would be no scope for hut users to interfere with settings. Other possibilities are being explored with the contractors.

Waters Cottage

We consider that Waters Cottage is a special case. We feel that there is much to be done in terms of assessing the use of space and in providing adequate heating to all necessary areas. Undoubtedly, insulation would play a significant part in this. We suggest that a small team be set up to investigate fully the usage of Waters. Any recommendations from any such team would be followed up at some time in the future.

Birkness Cottage

Some members have asked why we are considering installing new heaters in Beetham Cottage when a significant heating / condensation / mould problem exists in Birkness Cottage. As explained above, we chose Beetham Cottage and the Raw Head properties as being typical.

The installation for Birkness Cottage would be broadly similar to that at Raw Head Cottage except for two heaters. (One less bedroom, only one toilet.) This would result in a significantly lower price (heaters and installation).

If we are to go ahead with an installation, it would be for the committee to decide which one. In any event, as noted, we would need to meet the contractor on site to agree the final details and a final price.