Background

2010/11 PWS milestone 5 is to review the provision of weather information for tourists and the tourist industry in the UK.

Information compiled in this report was obtained through internet research, a literature review and interviews with tourism industry experts and a public questionnaire.

The World Tourism Organization states that weather and climate are perhaps the most important influence on the choice of leisure travel destinations. Weather and climate also impact on the successful operation of tourism businesses. For tourists, the importance can be categorised into three areas (Wilson and Becken, 2010). Firstly, participation in many activities is affected by weather conditions on a particular day. Secondly, weather can pose risks to safety and health (Bently and Page, 2008) and lastly, the attractiveness and image of a place is strongly influenced by climate. For the tourist industry the relevance is mainly focused on management of risks and impacts associated with adverse weather conditions and capitalizing on opportunities provided by favourable weather.

Therefore, accurate, appropriate and user-friendly weather and climate information is critical to both tourists and the tourism industry.

Aims and Objectives

A consultation exercise was undertaken by the Public Weather Service Customer Group Secretariat in summer 2010 to provide the Met Office with requirements for current and future PWS needs of tourists and the tourist industry. The research focused on three questions:

i. What information is required by tourists when planning a holiday or day trip and how and when to they access it?

ii. What information is required by tourists during a holiday or day trip and how and when to they access it?

iii. What are the tourist industry requirements for and sensitivities to weather and weather forecasts?

Methodology

Information compiled in this report was obtained through several sources. Internet research and a literature review was undertaken to establish the current understanding and background information relating to weather and tourism. Interviews with tourism industry experts were held to gain information and opinion relating to the three main research questions. Finally, public views were gained from a questionnaire which was distributed via the Met Office web site and a Devon Tourist attraction (The Big Sheep).

The research assumes the following definitions:
Tourism: the practice of travelling for recreation, where recreation is defined as an activity in which individuals voluntarily engage for personal satisfaction or pleasure.

Tourist: day-trippers and holiday makers engaged in tourism and recreation activities anywhere in the UK (seaside, countryside, cities) and staying (when necessary) in accommodation including tents, caravans, B&Bs and hotels.

Day-tripper: Anyone who takes a trip to a UK tourist destination for recreational purposes during the day without an overnight stop.

Holiday maker: Anyone who spends a period of time including at least one overnight stop away from their normal place of residence, at one or more UK tourist destinations for recreational purposes.

Results

Results of the consultation exercise are presented in three sections addressing each of the questions posed by the study.

i. What information is required by tourists when planning a holiday or day trip and how and when do they access it?

Different information is required by tourists at different stages of the planning and holidaying process. Climatic information is most useful in the time period months to weeks ahead of a trip to allow tourists make decisions about destination choices, timing of travel, activity planning and insurance needs. This is particularly true for overseas visitors to the UK. Hamilton and Lau’s (2005) study found that 73% of interviewed German tourists had acquired information on the climate of their holiday destinations, usually on more than one aspect, but most often temperature. James Carney, Visit Scotland, also agreed that climate information for overseas visitors would be useful as much of their web traffic is from visitors planning trips from mainland Europe. It is therefore important that the information is understandable to those who don’t read English, suggesting that symbols are more useful than words for this audience.

Average monthly temperature summaries are the most commonly provided information for tourists (Scott and Lemieux, 2009). However, average conditions are of only limited value as tourists are more likely to be interested in the possibility of experiencing certain extreme conditions such as hot temperatures or sunshine hours during specific periods of the year. Information on extremes is particularly important and valuable in areas where weather could pose a real health or safety risk for tourists. For the tourist industry though, depending on the sensitivity to weather of a particular recreational activity, climatic information can help scheduling and promoting of alternative indoor entertainment facilities (Perry, 1972).

Becken and Hay, (2007) noted 3 different climate and weather factors that are important for tourists when planning a holiday:

(i) aesthetics, such as sunshine/cloudiness, visibility and day length;

(ii) physical parameters, such as wind, rain, snow, ice, air quality and UV radiation;

(iii) thermal impacts, such as integrated effects of air temperature, solar radiation and humidity.
Freitas (2003) found tourists need answers to key questions when planning a holiday, such as, when is the best time to visit?; What clothing or equipment is needed?; What are the weather hazards or climate extremes likely to be? Standard weather data are not always reliable indicators of the significance of atmospheric conditions. The effects of wind, humidity, solar radiation and level of a person’s activity will all impact on how temperature is experienced. Therefore, information about wind chill and ‘feels like’ temperatures is an important consideration to help tourists make decisions about the impact of likely weather and climate conditions.

Results from the questionnaire carried out for this report found historic averages were not shown to be important for UK day trippers and holiday makers, with only 5% of holiday makers planning a trip noting them as useful information. Rainfall was the most useful type of weather information for tourists and day trippers in the UK, followed by maximum temperature, minimum temperature, latest observations, windspeed and direction.

The survey results also provided clear evidence that weather information is an important requirement for those planning a day trip or holiday, with 94% of respondents checking the weather forecast before they leave. The preferred method of access during the planning phase was the internet (~40%), followed by TV (~25%) and radio (~15%), and the most popular provider was the Met Office (used by 142 people or 43%), followed by the BBC (29%), Metcheck (8%) and Google (6%). However, it should be recognised that the majority of respondents returned their survey information via the Met Office web sit which will clearly bias the results.

According to research undertaken by Visit England, tourists planning day trips tend not to do so very far in advance of the trip. Almost 50% of respondents usually plan about a week in advance and a further third claim not to plan in advance at all. Results from the questionnaire carried out for this report support those found by Visit England. When asked about how long before leaving for a holiday or day trip tourists checked a weather forecast, 59% of day trippers checked a forecast either on the day of their trip or 1-2 days before. In addition, when asked about how frequently they checked the weather forecast subsequently prior to travel, most respondents did not check again until the day of their holiday or trip, with 56% of day trippers and 38% of holiday makers responding in this way. At these timescales; 1 week to 1 day or less ahead, tourists require observational, now-casting and forecast information to aid in decision making about ‘last minute’ holiday choices, and travel routing.

ii. What information is required by tourists during a holiday or day trip and how and when to they access it?

VisitEngland research last year found that there is generally a pragmatic approach to the weather by UK tourists and day-trippers. There is an appreciation that they must have provision for and/or alternative activities if it rains, and for many part of the fun of a holiday is that poor weather can enable new and interesting discoveries of things to do. However, this wears thin if there is continuous bad weather. Mark Smith (Bournemouth Borough Council) was very keen that the Met Office web site included links to things to do in dry and wet weather.

As noted previously, different information is required by tourists at different stages during the planning and holidaying process. Whilst on holiday, tourists require observational information, now-casts and short-term forecasts to aid with on-site behaviour and activity choices and spending decisions. Our survey showed that when on holiday or out for the day, most respondents check the weather on a daily
basis; 65% of respondents on a UK holiday and 46% of day trippers. However, almost a third (29%) of day trippers said they never check the weather. Perhaps unsurprisingly for a survey that was largely web based, we also found that the internet was the most popular way for tourists to access weather information, whether on a day trip or a longer holiday, with TV and radio following closely behind. Around ~5% of respondents preferred to see weather information via each mobile technology. However, when considered in total (i-Phone app, mobile SMS, mobile internet and mobile app) the percentage is comparable to the internet, TV and radio. This partly agrees with a recent study in New Zealand (Wilson and Becken, 2010) which found the most popular sources consulted were the internet and TV, but also newspapers.

Accuracy of observations and forecasts also impacts strongly on levels of trip-satisfaction and must be representative of the local conditions experienced by tourists, (Alcoforado et al., 2004, 2007). An example where this may have been this case is Bournemouth. Observations taken at Hurn (Bournemouth airport) which is the nearest observations station to Bournemouth are not necessarily representative of conditions in the town, (Hurn is ~ 5 miles from Bournemouth beach and 10m above sea level). This is part of the reason Bournemouth have cited for moving to a private weather provider.

The tourist industry have stated strongly they want accurate, high temporal resolution (1-3 hourly), regional and site specific forecasts over short (1 – 5 day) forecasts, available on a variety of platforms. In addition, the forecasts should be updated frequently. Our evidence has shown that tourists were mostly in agreement with this. The survey results found, when questioned about temporal resolution of forecasts during the planning phase as well as during a holiday or day trip, higher frequency information (hourly and three hourly) information was preferred by around 40% of day trippers and 25% of holiday makers, whether planning or taking a holiday. Half of respondents planning or taking a UK holiday said that regional forecasts are most useful to them. However, for day trippers location specific forecasts were seen as the most useful (71% of respondents planning a day trip and 63% taking a day trip). A less clear picture was seen when tourists were asked about which forecast information would be most useful to them. Around 30% of those on a UK day trip responded that hourly, 3-hourly and daily forecast information was most useful. For those planning and taking a UK holiday, 26% of respondents said they found 5 day forecasts most useful and while 25% of holiday makers said daily forecasts were most useful.

Feedback from the tourist industry also suggested that use of symbols and probabilistic forecast information would be welcomed. However, in response to the question how would you like weather information displayed, we found that tourists showed little difference in their preference between text forecasts, symbols and probabilities.

When asked about how important tourists felt it was to have a separate area on the Met Office web site for tourist forecasts, more felt this was the case (38%) than not (15%). A similar trend was found for responses to the question should the Met Office web site have a customisable homepage (33% important, 18% not important). However, the view from the tourist industry was that a separate area on the web site was not a good idea because it ‘pigeon-holed’.

iii. What are the tourist industry requirements for and sensitivities to weather and weather forecasts?
Tourism is one of the largest industries in the UK. According to a recent Deloitte study 'The Economic Contribution of the Visitor Economy – UK and the nations' tourism was worth £115.4bn to the UK economy in 2009 once the direct and indirect impacts are taken into account, equivalent to 8.9% of UK Gross Domestic Product. As weather is often one of the most important factors is determining how well individual operators, resorts or sectors fair economically, it should therefore be of no surprise that the tourist industry are hugely interested in weather and climate and very vocal about weather and weather forecasts that have a negative impact on them.

Elements of the tourist industry (e.g. Bournemouth Borough Council, South West tourist board) will always complain in the press about the impact of poor weather and forecasts. However, as Visit Britain noted in their January 2008 edition of Foresight, ‘it is worth remembering that in some circumstances ‘one man’s loss is another man’s gain’ in relation to wet weather’. In the wet period of spring/summer 2007 seaside resorts had beaches, but indoor attractions proved very popular. Rainy weather led to displacement of trips, and not a downturn in overall trip taking. Visit Britain also noted that such displacement could boost overall tourism spending, as rather than sunbathing on the beach with the only purchases being for an ice cream, a family might go to a paid indoor attraction or museum.

Weather is a significant factor effecting visitor numbers to attractions in Scotland, England and Wales according to Visit Scotland, Visit England and Visit Wales. However, although always important, the relative significance of weather varies from year-to-year depending on the importance of other factors. For example, last year research undertaken by Visit England showed that significantly more people took or expected to take a break in the UK in 2009 than in 2008 and that the revised Met Office seasonal forecast (moving away from the ‘barbecue summer’) had a minimal impact on holiday plans. These ‘staycationers’ tended to take UK holidays as a result of economic factors such as lack of job security, uncertainty about disposable income and the hope of last minute deals.

Despite these negative opinions, interviews undertaken for this paper found that the tourist industry generally regards Met Office forecasts as the best available and that the short-term forecasts in particular as reasonably accurate. This is true even of those who have been negative and critical about the Met Office in the press (e.g. David Cam, Blackpool Pleasure Beach; Mark Smith, Bournemouth Borough Council; Rick Turner, The Big Sheep). However, all those interviewed wanted to see more information on how accurate forecasts were; particularly the parameters temperature and rainfall.

There was also a strong and clear perception that forecasts tend to err on the ‘pessimistic side’, and that the delivery of the forecast message could be improved. In addition, the long-range (monthly outlook) forecasts are not well received by the industry as they are seen as containing too much uncertainty.

Both Roger Pride (Visit Wales) and Rick Turner expressed a desire for greater climate information as part of the PWS in order to help put UK regional variations and the UK situation into a wider context. Roger spoke about ‘busting myths’ about the weather and climate in Wales and Rick wanted to compare the UK with other popular tourist destinations overseas. A good example of this was given by Visit Britain in their Foresight magazine in 2008: http://www.visitbritain.org/Images/FORESIGHT%20issue%2051_tcm139-167374.pdf where they compared the British weather to other parts of the world and found for example, that the average number of days on which it rains in London each year is
less than Paris, Santander and Wellington and that London is drier than Rome, New York, Brisbane, Rio de Janeiro and Tokyo.

There are particular geographic areas and times of year to which tourist operators are especially sensitive. Forecasts for coastal locations are often perceived as being less accurate by the tourist industry. Anecdotal evidence from David Cam, Blackpool Pleasure Beach suggests that the weather on the beach in Blackpool is often much better (sunnier and drier) than that ~15 miles away in Preston, although the forecasts are often then same. A similar story was relayed by Mark Smith, Bournemouth Borough Council.

The tourist industries on island holiday destinations are particularly sensitive to the weather. For example, tourist authorities in Jersey have complained to the BBC because they say that the Channel Islands weather is frequently ignored or inaccurate in national broadcasts. They say this has an impact on tourist revenues because it is well known that people take impulse breaks based on weather reports, (BBC Radio 4 report, You and Yours 29/7/10). The PWS does not forecast for the Channel Islands; the Jersey Met Department forecasts for the area. However, that distinction is not understood by the public watching BBC broadcasts, and the issue remains valid for other island holiday destinations such as the Isles of Scilly, Isle of Wight and the Hebrides.

Perceived or real inaccuracies in forecasts during school holidays have a particularly significant impact on the tourist industry. Tourist operators in North Devon attacked the Met Office in May this year following an ‘inaccurate’ forecast for half-term which they said deterred many people from visiting. In a more extreme reaction, following a ‘poor’ forecast on a Bank Holiday last year, Bournemouth Borough Council decided to employ a private weather provider to produce forecasts for their town.

Tourist industry members from Visit England, and Mark Smith (Bournemouth Borough Council) noted that the Met Office site did not allow easy access to site specific weather information and felt it was important that this be changed. Overall the general impression of the web site was that it was too technical, too complicated and took far too many clicks to get to the basic weather information.

**Summary of key findings**

Both weather and climate are extremely important for tourism, and it is often the perception of climate that may be more important than the reality. Tourists make decisions based on what they believe the climatic conditions of a destination are. Although this report considers mainly weather and climate requirements, the impact of *climate change* on tourism in the future should not be ignored.

The discussion above is summarised to provide the following key findings:

a. The PWS pages of the Met Office web site are too technical, too complicated and take far too many clicks to get to the basic weather information. They should be simplified.

b. The tourist industry would like the weather forecast message should be ‘glass half full’ rather than ‘glass half empty’; e.g. sunny with periods of rain, rather than rain with period of sun. The Met Office should respond to this by making sure the message clear, straight forward with as much emphasis placed on benign weather conditions as significant events and episodes. Where there is uncertainty associated with the forecast this needs to be made very clear.
This should be a particular focus at holiday times (e.g. school holidays and bank holidays). The Met Office and PWSCG should continue to ensure good engagement with broadcasters to enable consistency of positive messaging.

c. Weather forecasts need to include ‘feels like’ information as well as information on extremes. Forecast information should be delivered in a way that allows tourists to consider how it will impact them. For example, it should not need to tell people what to pack or what to do, but it should allow them to reach decisions easily. Particular focus should be given to extreme weather conditions.

d. Forecasts should be as simple as possible, have a strong visual impact and use symbols and the minimum amount of written text. However, greater (written) detail should be available behind this for those who want more information. Forecast information for the ~30 million visits per year by overseas residents to the UK should be made available in a clear, language independent and easily accessible format.

e. Where feasible, forecast verification information should be provided, particularly for temperature and rainfall.

f. Real-time observations should reflect the local conditions experienced by tourists. If this is not possible, information should be made available to explain possible discrepancies.

g. Forecasts should be delivered with a minimum 3-hourly temporal resolution particularly when delivering rainfall and temperature information for more than just the first 2 days of the forecast.

h. Forecasts should be available on as wide a variety of platforms as possible, including being in a format that is easily printed (operators want to print forecasts from the web site to display for customers).

i. Particular focus should be given to forecasts for islands and coastal areas, particularly if there are significant differences in the weather compared with nearby mainland/inland areas.

j. Climatic information highlighting regional variations within the UK and comparing the UK with other holiday destination could be provided, although this should be carefully considered. This could include information that dispels myths and separates fact from fiction and should be presented in an easily understandable, digestible, and ‘chatty’ format.

k. The Met Office should continue to counter negative publicity from the tourist industry by following the Met Office communications strategy: Encourage the media, commentators, editors, columnists, bloggers, news reporters and communities to ‘move to advocacy’ on our behalf. Use a confident and authoritative tone and avoid being defensive.

Next steps

a. Response from Met Office to requirements with proposed recommendations, including costs, timescales and feasibility by 31 Dec 2010.
b. PWSCG Secretariat and Met Office attendance at Tourism Management Institute (TMI) annual conference in London on 5th October to lead a workshop to ask tourist industry members about their weather requirements and sensitivities. The outcomes will be used to confirm and/or supplement those presented in this report and if necessary an annex will appended.

c. Investigate making this, or similar, an annual event to facilitate dialogue between PWS and tourism industry.

d. Invitation to Visit Scotland to annual PWSCG meeting in Scotland to facilitate ongoing dialogue between PWS and tourism industry.

e. The delivery of any new services is required by the end of March 2011.

References


