# Camping and Open-Air Tourism: An Opportunity for Sustainable Tourism in Coastal Areas

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#### Abstract

Coastal areas of the Mediterranean exert significant powers of attraction during the summer months, resulting in a highly seasonal phenomenon. In order to meet market demand during the summer period, permanent accommodation structures have been established in coastal areas, bringing with them major environmental impact. In parallel to such developments, the tourism market has witnessed the increasing growth of models such as ecotourism, offering greater contact with nature and a respect for the integrity of the sites visited. In order to provide a response to this paradox, the spread of open-air tourism and forms of camping are seen as able to guarantee the reception of a great number of visitors whilst minimizing environmental impact through the use of flexible and movable structures. The present work investigates what may be regarded as good practice applicable to this type of structure, both in terms of micro-scale residential accommodation units and macro-scale of a site as a whole.

Keywords: camping, mobile architecture, open-air tourism, sustainable tourism.

#### Introduction

Tourism is a complex phenomenon which has repercussions in social, environmental, cultural and economic terms. Observing the phenomenon through the eyes of an economist, tourism might be defined as an industry which, treating locations and means of transport as its raw materials, produces experiences that offer the physical movement of the tourist from residence to a pre-selected destination.

In order to fully comprehend the economic significance of the tourism industry, it is sufficient to reflect on its overall turnover as being competitive for first place alongside the following five sectors: arms, electronics, pharmaceuticals, automobiles and oil. Born a somewhat elitist phenomenon, tourism began gaining in economic scale during a period of democratization following the Second World War, due to structural developments such as the introduction of paid leave (and the consequent exponential increase in leisure time for workers), increased accessibility to transport (both public and private) and the standardization of supply (tourist itineraries and package tours), transforming tourism into a mass phenomenon.

So as to maximize profits, mass tourism is involved in processes identifying potential destinations on a global level which meet the expectations of a substantial number of aspiring tourists. The arresting power of such destinations frequently lies in the quality of its landscape, whether natural or urban, and the peculiarities of local cultures. The arrival of high numbers of travellers in such places frequently occurs without structure or limitations, guided only by economic logic. This has regularly resulted in serious

damage to the social or territorial area involved, particularly in regions where tourism has taken on the bona fide character of colonizer. In such cases, tourism loses its power as an economy-driver, becoming a dangerously double-edged weapon: providing economic profits, yet at the expense of the given location losing its power of attractiveness, its scenic value compromised by the arrival of careless visitors. The phenomenon of high-level tourism flows results as even more dangerous the more fragile the ecosystem of the location in question. Publicity in the sector relies on the power of attraction of unspoilt, idyllic, virgin areas. Indeed, the act of attracting tourists en-masse implies a necessary adaptation of the destination, often depicted as an earthly paradise. Whilst, therefore, the tourist may seek the promise of exclusivity, it immediately becomes evident that the phenomenon of mass travel necessarily attracts large numbers of visitors, thus quickly affecting the product. The desire to reach such a paradise soon becomes an experience of disillusionment, thus creating an apparent paradox that sees tourism destroy its raison d'être: the attractive power of a tourist destination.

### **Camping:** flexible and sustainable accommodation

The coast is one of the foremost natural attractions for tourists, as well as representing an important economic resource for countries such as Spain and Italy. The Mediterranean basin is characterized by a temperate climate, which concentrates incoming tourism in the summer months, especially travel relating to the appealing combination of "sun, sea and sand". Despite the seasonal pattern of incoming tourism, especially that related to beach holidays, most forms of accommodation are based on construction techniques identical to those found in residential building. Such structures are not removable, and constructed using heavy, invasive technologies lacking flexibility. If located in fragile areas, for instance coastal zones, fixed accommodation structures may well compromise the integrity of the landscape permanently, leading to the paradox outlined above. Considering such structures witness the peak of arrivals in a certain period of the year, there is a pressing need to encourage the use of technologies with low environmental impact and a high capacity for flexibility in relation to their existent demand. An alternative type of accommodation that more than meets these parameters is the campsite, which, in its various configurations, offers an open-air based experience, offering, to a greater or lesser degree, real contact with the natural environment. The campsite is a complex structure that reveals its true nature through various scales: through a macro-scale of an urban-landscape essentially integrated with its context, as well as through a micro-scale of flexible and mobile housing units. The campsite therefore offers the possibility of applying concepts of sustainability and flexibility to a significant territorial area. The proliferation of campsites in areas of environmental importance, in the context of seasonal tourism patterns, would guarantee the preservation of the environmental and scenic value of the area in which it is located due to the movable nature of the structure, allowing such spaces to "breathe" during periods of low-level tourism. Drawing a parallel with the use of agricultural land, the campsite offers the possibility of a "crop rotation" system applied to structures, keeping the land as "fallow" during the low season.

Sustaining the campsite as a tourism model which respects the value of place is, moreover, a strategy consistent with market trends: the international economic crisis of recent years has led to greater attention by consumers to their own costs. Applying this general principle to the tourism sector has resulted in the rediscovery of low-cost travel approaches. Open-air tourism has consequently seen an increase in turnover, arising from the fact that new groups of tourists attracted by such an inexpensive tourist offering have joined more seasoned camping enthusiasts who had previously opted for such an experience simply through choice.

At the same time, the recorded increase of incoming tourism selecting open-air accommodation is due to a growing ecological awareness amongst tourists. Such a development may be located alongside the emergence of a collective consciousness in terms of the environmental impact of human activities, including leisure time. This is supported, not only by general cultural logic, yet also by a growing need felt by tourists to "switch off" from urban life, seeking to combine the holiday experience with notions of

real relaxation, regaining contact with nature. This is confirmed by the pervasive growth of a so-called "alternative tourism", for instance ecotourism and rural tourism. Open-air tourism has traditionally been considered as somewhat Spartan, yet recent trends also highlight the rapid diffusion of a new style of camping known as "glamping" or, rather, "glamorous camping". Such a development would seem to combine the principals of respect for the environment alongside higher quality in terms of comfort and service compared to traditional models.

This reversal in market tendencies, which emphasizes the progressive emergence of small-scale models with low environmental impact as compared to large accommodation structures aligned to the logic of mass tourism, is also supported by a process of awareness on a global level by the tourism sector. In recent years, as Patrizia Battilani states in her work *Vacanze di pochi, vacanze di tutti*, we are witnessing a transition from mass to global tourism; the first full of paradoxes, paying little heed to the notions of sustainability and responsibility of the tourism phenomenon whilst the second sees the emergence of an alternative tourism, respectful of place and the peoples involved. Global tourism is also supported by international policy which has produced, over the years, a series of "ethical charters" and "codes of behaviour" which function as guidelines for the key players engaged in tourism processes, from operators to consumers.

Despite the market and global awareness directing the tourism industry towards environmentally friendly models, respecting the natural and social environments in which it operates, the processes of conversion of the architectural heritage of tourism are slow and mechanical - the tourism industry is generally happy to slowly roll along established tracks.

# The flexibility of tourist structures: a response to changes in demand

The performance of the tourism market is influenced by highly variable factors including climate, security and economic patterns. The influence of such factors is a further element in favour of flexible "mobile" tourist architecture, removable and portable in a real sense. A parallel should be noted in this context with the urban avant-garde theory developed by Yona Friedman during the 1950s in relation to mobile architecture. Friedman sustained that the traditional city does not fit the needs of modern society, in which socio-economic conditions quickly fluctuate. The inhabitant of the city therefore adapts in terms of needs and lifestyle in accordance with such varying conditions. According to Friedman, architects in modern society are public servants who must translate the needs arising from the general population into a technical scheme. Those who inhabit residences created by architects are, in fact, not simply consumers of the architectural product but, rather, must be understood as practitioners of living space, since their experience of living allows them to formulate precise concepts regarding the management of their space and how it corresponds and adapts itself to their specific needs. Satisfying the demands of residents means predicting change within a period shorter than the average age of a structure built employing traditional technologies. Therefore, Friedman theorizes, it is appropriate for individual residential units to be designed, together with the city as a whole, in order to allow the potential for change alongside the changing needs of residents themselves.

Drawing a parallel with tourism, it is evident that the needs of tourists are changeable to an even greater degree than those of residents. A campsite, when built according to underpinning principles of sustainability and flexibility, can provide a structure wholly capable of transformation, as Friedman had theorized with his mobile cities. Furthermore, this would ensure, as described above, a reduction in the environmental impact of the structure. Friedman did not evaluate this aspect in his work, which has since been investigated by a number of his associates, principally in research examining mobile and transportable housing units.

## The relationship between camping and nature

Camping has always had, at its very basis, a strong bond with nature. Indeed, its origins as a practice do not stem from tourism but, rather, as a leisure pursuit during the early twentieth century, a period in which the cult of body care and sporting activity practiced in the open air grew in popularity. 1896 was to see the first modern Olympics games, thanks to the initiative of Pierre de Coubertin. The success of the event led to the rapid proliferation of outdoor sports, alongside the development of pedagogical theories that considered the practice of activities that tempered the body and spirit as critical. In order to pursue such activities in a natural setting, for instance cycling or rowing, the young would frequently leave their homes in urban areas to stay in the countryside. The increasing demand for suitable accommodation led to the establishment of small guesthouses as well as the increasing use of camping equipment, sourced from military provisions, for accommodation in rural areas. Such equipment was initially extremely heavy yet, as the practice spread, the market responded with lighter and more transportable products. Camping of the period was, therefore, defined as a sport which involved living outdoors on the resources available, comparing and contrasting civilized culture with nature in its wild state.

Such origins are therefore inextricably linked to means of transport, essential for reaching more remote destinations. In the early twentieth century numerous cyclist-camper clubs evolved, uniting the followers of both in a logical integration. The first group of cyclist-campers was founded in England in 1901, and christened itself as the Association of Cycle Campers, better known today as The Camping and Caravanning Club. In an analogous development, a number of young wealthy car owners took up the practice of camping, making use of their vehicle to travel from one site to another. Camping in Italy developed in close relation to the automobile as a relatively elitist phenomenon. Indeed, the first appearance of a site was an auto-campsite that remained the reserve of the wealthy until the expansion of the family car market several years with, on April 13, 1932, the establishment of l'Auto Campeggio Club Piemonte (A.C.C.P.), the first Italian camping association, with the support of the RACI (Royal Automobile Club of Italy). The initiative was led by Luigi Bergera, an outdoor living and automobile enthusiast. Since the development of the automobile as an accessible private vehicle for the middles class, camping has become a practical choice for many, due to the affordability and flexibility of the tourism experience, while preserving its characteristic contact with nature. The successive phase in the evolution of the campsite was the use of caravans. This led to the emergence of conflict within established associations between camping purists, who considered camping to strictly imply the use of a tent, providing direct contact with the surrounding environment, and innovators, who supported the use of the caravan.

# Flexibility and mobility in tourist structures

### Mobile architecture and camping

In order to ensure the genuine sustainability of camping, it is necessary to reduce its impact on two scales, that of individual accommodation units and that of the structure as a whole. With regards the micro-scale, flexible units should be adopted, which are both mobile and that make use of sustainable technologies. The theme of mobile architecture applies not only to the tourism sector, but also to a multiple of themes related to housing. The classification devised by Roberta Marcenaro during her studies of the mobile city may be employed in defining the areas in which mobile units are utilized. Mobile architecture is employed in cases of force majeure, acts of god such as natural disasters, or in a voluntary manner. In this first case, the use of mobile homes is a response to catastrophic events or social emergencies. In the second, the use of lightweight and removable technology is motivated by economic requirements, either industrial (necessity of accommodation in the vicinity of industrial or production facilities for generally restricted periods), military (mobile camps) and, finally, for tourism.

The first historical example of a mobile home is that of the nomad tent which, depending on the civilization to which it belongs, demonstrates a range of forms and names such as the yurt (Asiatic populations), tipi (Native Americans) and Bedouin tent (populations of the Arabian peninsula). A common feature is the use of textiles and ease of transport, essential for the periodic movement of migrant groups.

The tent, which may be defined as emblematic of mobile homes is, by definition, constructed from textiles, but the concept of mobile homes was to become the object of research and experimentation with the birth of prefabrication in construction and, therefore, with the use of significantly heavier and higher performing materials than textiles. In the early twentieth century, corresponding to the introduction of materials such as steel and aluminium in construction, investigation began into minimum housing models. The design of the first mobile home prototypes arose from a combination of studies on existenzminimum and the application of lightweight materials in the civil sector. Architects such as Le Corbusier, Pierre Jeanneret, Jean Prouvé and Richard Buckminster Fuller proposed solutions to the issue of mobility housing, applying the logic of industrial construction. Such early examples of mobile homes were designed according to the logic of ease of transport, rapid assembly and cost-effectiveness of the product. The enthusiasm for these avant-garde works derived from their possible social implications: a mobile home could provide a neo-nomadic lifestyle, during a period of growing social mobility, unseen during the modern age. Possibilities were raised in terms of the non-permanent use of such structures, among them the holiday resort. This is confirmed by the institution of the competition La maison de weekend légère et dismountable organized in France from 1935 onwards by L'Architecture d'Aujourd'hui. The contest required the design of a lightweight housing unit, low-cost and created from recyclable parts that could host a family with three children plus possible guests for a weekend, transportable by car or boat, to be sited in any location. The following year, 1936, saw the extension of paid leave to all French workers, a crucial step in the growth of practical tourism.

After World War II, the search for models that were increasingly easy to transport as well as the democratization and increase in private vehicle ownership led to the diffusion of camper vans and caravans. This type of accommodation provides for the integration of the domestic space with the means of transport, although earlier examples had already been seen employed by travelling communities during the seventeenth century.

The three principal types of accommodation, therefore, which meet the criteria of flexibility and mobility are tents, prefabricated mobile homes and vehicles such as camper vans. In turn, each category must ensure that building structures meet environmental quality parameters in order to ensure their sustainability.

# The sustainability of open-air tourist facilities

The low impact of individual units must be supported by the organization of a site, an infrastructure network and the sustainable management of both resources and waste. From a management perspective, an incentive tool towards guaranteeing the effectiveness of sustainable practice is represented by the range of quality standard marks, designed to ensure the environmental quality of tourist services (for instance ECOLABEL). Such marks represent the application of good practice, which, in turn, reduces operating costs through environmental efficiency as well as providing positive publicity due to the visibility of the mark.

The ECOLABEL mark, extended to the tourism sector in 2003 thanks to European Community Decision 2003/287/EC, provides guidance regarding, above all, the conservation of natural resources. Campsites were, in 2005, included among the types of accommodation that could benefit from the mark. Specifically, one of the objectives of ECOLABEL for tourist structures is the containment of air, water and soil pollution through good practice. Moreover, the mark ensures effective management and waste

recycling and the reduction of waste in terms of both energy and resources. As part of the general objective to respect the site in which the accommodation is located, the mark also upholds principles of biodiversity and a diet that promotes the use of locally sourced products.

Again in terms of the environmental quality of the site, various parameters exist in order to guarantee certain outcomes. Primarily, the choice of exactly where to locate the campsite is fundamental in terms of minimizing the impact of the installation of infrastructure. It is preferable to install the structure in an area in which certain infrastructure and urbanization is already present. Furthermore, given that 90% of the energy consumed by tourism is accounted for by transport, it is clearly good practice to locate a campsite within reach of external services, tourist attractions or places of interest, accessible by either public transport or pedestrian or cycling routes.

In terms of the installation of the structure, it is essential to minimize impact through the integration of new structures with the natural and built environment. This can be achieved by respecting the existing topography, mitigating the light and noise pollution generated by activities inside the camp and locating services and permanent structures in a minimally invasive manner. In order to reduce impact on the territory, good practice requires the absolute minimum in terms of necessary construction. This may be summarized in terms of: reception space, dining facilities, sporting and hygiene facilities. The environmental quality of these structures must take into account the general parameters of sustainable construction, and respect for the architectural style of the area and its visual impact.

Vegetation may be used, in addition to the planting of communal green areas, to replace artificial structures in the creation of shade, due to their properties of thermoregulation, to provide sound insulation, screening and the filtering of pollutants. It is important to concentrate on native species, integrating the new with existing vegetation.

The preparation of the intervention master plan should ensure that all accommodation units have easy access to services and public areas. The areas in which individual units are located must also ensure the highest possible levels of privacy. Access routes between communal areas and accommodation units should, where possible, be hierarchical, separating traffic flows from pedestrian routes.

### Survey on current open-air tourism provision

In order to assess whether current open-air tourism provision meets the requirements as outlined above, evaluation was carried out of campsites in two distinct geographic areas yet with similar climatic conditions: the north-east of Sardinia and the Empordà region, in the border area between Catalonia and France. In the case of Sardinia, campsites were selected from the published *Faita Federcamping* list. In Spain, the sites were those highlighted by the *Associació de Càmpings i C.V. de la provinica de Girona* within the Province of Girona.

The criteria used for research focused primarily on geographical position: those chosen were in closest proximity to the coast, in order to analyze the relationship between the littoral zone (public space) and the appurtenance of the camping area (private space). This also allowed for the analysis of the treatment of the boundary between the two areas and any measures adopted in order to mitigate the impact of tourist facilities. Secondly, campsites were chosen with medium to large surface areas that had a range of complex services. This allows for an analysis of the relationship between the areas designated for accommodation units (whether tents, campers or mobile homes) and communal services. Finally, the campsites were divided into three categories according to their location with respect to the context: suburban, urban or isolated campsites. In the case of Sardinia, twelve campsites were chosen divided between the provinces of Sassari and Olbia Tempio. Of a total of ten Catalan Campsites, however, all fall within the province of Girona.

Table 1. List of selected campsites

| Table 1. List of selected |                         |  |
|---------------------------|-------------------------|--|
| Name of site              | Location                | Туре   |
| La Mariposa               | Alghero                 | Suburban campsite, coastal                         |
| Calik                     | Alghero                 | Suburban campsite, on the Calik lagoon             |
| Valledoria                | Valledoria              | Isolated campsite, coastal                         |
| La foce                   | Valledoria              | Isolated campsite, coastal                         |
| Baia Blu La Tortuga       | Aglientu                | Isolated campsite, coastal                         |
| Saragossa                 | Aglientu                | Isolated campsite, coastal                         |
| La Liccia                 | Santa Teresa di Gallura | Isolated campsite, on promontory coastal hill      |
| Acapulco                  | Palau                   | Urban campsite, coastal                            |
| Baia Saraceno             | Palau                   | Urban campsite, coastal                            |
| Capo d'Orso               | Palau                   | Suburban campsite, coastal                         |
| Isuledda                  | Canniglione di          | Suburban campsite, coastal                         |
|                           | Arzachena               |  |
| Golfo di Arzachena        | Arzachena               | Isolated campsite, on main road connecting beaches |
| Joncar Mar                | Roses                   | Urban campsite, in consolidated urban centre       |
| International             | Castelló d'Empúries     | Suburban campsite, coastal                         |
| Amberes                   |                         |  |
| Laguna                    | Castelló d'Empúries     | Suburban campsite, coastal                         |
| Nautic Almata             | Castelló d'Empúries     | Isolated campsite, coastal                         |
| Riu                       | Sant Pere Pescador      | suburban campsite, on river                        |
| La Ballega Alegre         | Sant Pere Pescador      | Isolated campsite, coastal                         |
| Cala Montgo               | L'Escala                | Urban campsite, in consolidated urban centre       |
| Illa Mateua               | L'Escala                | Urban campsite, coastal                            |
| Maite                     | L'Escala                | Urban campsite, on small lake                      |
| Inter Pals                | Pals                    | Urban campsite, coastal                            |

A field survey was carried out during the months of July and August 2010. The period chosen is high season in the areas of study. This allowed for a combination of a physical inspection of the facilities alongside the study of the behaviour and appropriation of space by users. The survey consisted of a tour of the facility in order to collect data on aspects of urban planning, landscape and architecture. The research is also located within the context of a wider study to be carried out over the coming months which aims to provide an analysis of management systems of the above listed campsites in order to verify the application or otherwise of good practice in sustainability.

The survey allowed for the study of, primarily, the relationship between the open-air accommodation and its context. The degree of interaction between what is "inside" and what is "outside" the limit of the campsite and its structure may be, to a greater or lesser degree, within the site enclosure. The perimeter, in turn, may be more or less permeable, particularly in areas of scenic relevance such as beaches or waterways. The perimeter of the camp is central in terms of defining the degree of permeability of the structure within its location context. Furthermore, the landscape has, sometimes within the perimeter of the structure, remained unchanged, aside from small functional changes in order to accommodate receptive facilities. In other cases, the landscape within the camp environment is completely changed, resulting in landscapes characterized by the anonymous trunks of tall trees providing shade.

Access routes are always controlled, but vary according to the level of visual introspection between internal areas and access roads, thus providing varying levels of privacy. The relationship between access and accommodation units is diverse: in some cases there is no filter between pitches and the access

barrier, while in other cases the vegetation or the presence of communal services close to the entrance allows for better flow distribution.

The relationship each campsite structure has developed with the littoral zone is variable. In some cases the site freely extends towards coastal dunes, and accommodation units (whether pitches for tents or caravans) directly overlook the beach. In other cases a perimeter fence clearly demarcates the limits of the site, with intermittent steps in line with the recognised pathways found within the main structure. Other sites separate the accommodation areas and the beach by means of a natural filter area with functional communal structures such as dining facilities, small performance spaces and so on. Consequently, the first part of the site beyond the littoral zone does not appear as a private space of accommodation units but, rather, provides a public dimension to be enjoyed by both residents as well as non-residents accessing the site from the beach.

The layouts of both accommodation units and communal services are highly diverse and relate to patterns of consolidated urban aggregation, ranging from radial development to orthogonal grids, through to more organic layouts, especially in cases where the terrain has forced the creation of terracing. The analogy goes beyond established urban structures: different types of accommodation may be located within the same structure, ranging from a maximum degree of flexibility and mobility to almost none at all. The first category is that of the tent, which has a maximum level of flexibility, but presents a minimum level of infrastructural constraints to an area. The second includes campers or caravans, which present a medium degree of flexibility and require a medium level of infrastructure. The third, the mobile home, at least in theory, presents a medium level of flexibility. In reality, however, the grouping of mobile homes is revealed as remaining stable over an extended period, thus requiring stable systems, comparable to that of the bungalow. The bringing together of these various categories of tourist accommodation follows logic recalling low-density residential developments. The provision of access, service spaces, the relationship with pathways and visual management follows the same logic of non-tourist residential complexes. The location of the main nucleus of the site may be either centralized or peripheral, yet in many cases is located near to the entrance to the campsite.

The conflict between the use of areas designated for accommodation units and those where hygiene facilities are located is generally resolved in an appropriate manner. In some cases there is no interruption between the two areas, if not the presence of a small path, thus locating pitches relatively close to such facilities. In other cases the vegetation is used to create an aesthetically pleasing filter between the two functions, whilst it is less common, yet more functional, to create a marked height difference between the facilities and other areas. In these sporadic cases there is a clear separation between incompatible functions at the expense of a sudden and notable difference in ground level. The structures designated for such facilities frequently recall the typical architecture of the area in terms of both materials and technologies thus contextualising local style.

Another issue analysed during the field study was that of the types of paths and their hierarchy. A division was noted between roads destined for vehicles and pedestrian and cycle paths. In some cases this distinction was clear, in others a certain degree of hybridization was revealed. The materials used for the construction of such routes presented a permeability range from zero to a maximum level of permeability.

The final element analyzed in the study is the landscape of the campsite. The concept of "urban" differs between each structure despite being placed in neighbouring contexts with the equivalent architectural and landscaping traditions. The landscape of the campsite is the result of two variables: architectural design, furnishings and vegetation on the one hand, and the mode of appropriation of space and customization by users on the other. The landscape resulting from the interaction between these two variables allows for the creation of different places, unique in character, and integrated in the local context to a greater or lesser degree. Some sites, for example, make use of typically local materials, technologies and plant species while others present themselves in more global terms.

### **Conclusions**

With regards to aspects of environmental quality at the various sites, Table 2 summarizes observed good practices:

Table 2. Good practices identified during the field study

| Î                         | Visual privacy assessed from outside of accommodation units              |  |  |
|---------------------------|--|--|--|
| Relationship with context | Mitigation of the fencing around the camp through the use of vegetation  |  |  |
|                           | Minimal impact of the site on existing landscape                         |  |  |
|                           | Use of native plant species, without imbalance in the dominant           |  |  |
|                           | landscape  |  |  |
|                           | Use of local materials and technologies in the construction of permanent |  |  |
|                           | facilities   |  |  |
|                           | Respect for orography including pre-existing formations                  |  |  |
|                           | Location of common facilities near littoral zone or waterways within the |  |  |
|                           | structure  |  |  |
|                           | Arrangement of accommodation units in order to guarantee privacy         |  |  |
| Organisation of site      | Centralization of communal facilities                                    |  |  |
|                           | Mitigation of the impact of hygiene facilities in relation to            |  |  |
|                           | accommodation units  |  |  |
|                           | Use of vegetation for shading  |  |  |
|                           | Hierarchy of routes  |  |  |

Research will proceed over coming months with the analysis of campsite management systems to ensure the widespread implementation of good practices on sustainability.

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