

# Into the Wild

## Restoring Young Minds in the Surrey Hills

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## Introduction

The county of Surrey is one of the most wooded counties in England. Just over a quarter of the total land area in Surrey is taken up by Surrey's AONB's (Areas of Outstanding Natural Beauty). These beautiful natural areas provide a wealth of resources to support the health and wellbeing for those living or working in and around Surrey, as well for visitors. This report explores how young people (aged 10-24) living in and around Surrey could benefit from these vast natural resources, how they might benefit, what opportunities are currently available to them and what is needed to improve these opportunities.

The report focuses on mental health. Most mental health problems establish themselves before adulthood, before the age of 14 in about half the cases (Kessler et al., 2007). It has been estimated that more than ten thousand young people in Surrey (between the ages of 5 and 15) suffer from a mental health disorder (Community Foundation for Surrey, 2017). But mental health is about more than not being ill. Being in good mental health means that young people thrive and fulfil their potential. Exposure to- and engagement with nature has been proven to support mental health in many ways (Bratman et al., 2014). It can, help reduce stress and anxiety, improving cognitive functioning, support physical activity and build self-esteem and confidence, to name but a few.

Despite the proximity of the vast natural resource in Surrey, not everybody currently has the same opportunities, abilities or motivations to access these resources, this is particularly true for those from more deprived areas. A better understanding of the needs and opportunities, the gap between them and the ways we can reduce this gap can help prevent mental illness, build resilience, support recovery and help more young people in Surrey to thrive.

## The problem

### Young people and mental wellbeing

Mental health is defined broadly (following the Mental Health Foundation, MHF, 2017) as: *"The capacity of each of us to feel, think, and act in ways that enhance our ability to enjoy life and deal with the challenges we face"*. Being in good mental health is about more than not being ill, it enables people to thrive (MHF, 2017). Good mental health includes psychological wellbeing including hedonic wellbeing (enjoyment and pleasure) and eudaimonic wellbeing (a sense of purpose, meaning, and fulfilment), self-actualisation (accomplishments, optimism, and wisdom), resilience (capacity to cope), and healthy relationships (Seligman 2010). Mental illness covers a range of cognitive, affective and behavioural disorders including common mental disorders such as depression and anxiety, as well as dementia, and substance use disorders, as well as less common illnesses such as schizophrenia, autism, and bipolar disorder (Bratman et al., 2019; WHO, 2017).

In the UK, mental illness represents the single largest cause of disability. Around a quarter of adults experience at least one mental health problem in any given year (MHT, 2016). One of the most prevalent mental disorders, depression, is said to be the largest single contributor to world disability (World Health Organisation, 2017). Lifelong persistent mental health problems are estimated to cost the UK taxpayer £8.6 billion annually (Department of Health, 2011). In 2015 almost 13% of the total number of days of sick leave were estimated to be associated with mental health issues (ONS, 2016)

and the number of people in the UK who feel that they are thriving, has been found to be as low as 13% (MHF, 2017).

Almost half of all mental health problems have been established by the age of 14 and three quarters before adulthood (Kessler et al., 2007; Kim-Cohen et al., 2003). Two thirds of health problems start in adolescence and these early difficulties are strong predictors of life-long mental health problems affecting social-emotional development, education and employment in adult life (MQ transforming mental health, 2016). In UK almost one in seven individuals aged 17-19 years old in the UK diagnosed with an anxiety disorder (NHS, 2018).

Adolescence is a challenging time. It is a time where young people become independent and develop their independent lifestyles and identities. A survey conducted by the Mental Health foundation and YouGov (2018) found that 60% of young people aged 17-24 reported feeling stressed due to pressure to succeed. Providing young people with a break from these pressures, allowing them to escape for a bit (into nature) can have great benefits. Helping young people to cope with what life throws at them. Boosting their resilience and support stress recovery in this transition period from childhood to adulthood can be hugely beneficial.

Recently there has been a shift in focus from treatment of mental health problems to prevention (Public Health England, 2019). Prevention is cheaper, easier and more effective than cure. For instance, the children's commissioner points out that the cost of an emotional resilience programme being taught at school is just over £5 per student, and the cost of six counselling or group CBT sessions at school is £229 per student. In comparison, referral to community CAHMS programmes costs around £2,338 and to pay for admission to an in-patient unit would set one back £61,000. Public health England even suggested that for every £1 invested in child resilience programmes implemented in schools, a saving of £5 in further support costs is seen over the next three years (Children's Commissioner for England, 2017). In addition, young people are still establishing their lifestyles (Association for Young People's Health, 2017), and habits are relatively flexible. Encouraging healthy routines at an early age are likely to have significant long-term benefits for wellbeing. Fostering good mental health is essential as it allows young people to "develop the resilience to cope with whatever life throws at them and grow into well-rounded, healthy adults" (NICE, 2013). Interventions that help improve resilience and self-esteem in young people is strongly recommended alongside the provision of support for young people on waiting lists (NHS, 2017).

## Young people in Surrey

Surrey is a relatively affluent part of the country. It ranks 150 out of the UK's 152 counties regarding average Index of Multiple Deprivation (Surrey County Council, 2018). Overall, the county of Surrey ranks better or equal to the national average for many measures of subjective wellbeing (Surrey County Council, 2017). Unfortunately, this does not mean that it does not have its problems. In fact, there are certain wards in the county where up to 40% children are living in deprivation (Surrey County Council, 2018). Westborough (in Guildford), Merstham (in Reigate and Banstead) and Maybury and Sheerwater (in Woking) are within the 20% most deprived areas in the UK (Surrey County Council, 2018). In 2018 a total of 7,019 children in Surrey were classified as a "child in need" by the Department of Education (2019), requiring social care services. The main reasons for this were abuse/neglect (44.9%), family dysfunction (25.2%), family in acute stress (11.6%), and child disability (11%). Such problems are strongly associated with mental health problems.

There are around 1.2 million people in Surrey and approximately 17% of those are between the ages of 10 and 24 (in 2011 196,800 out of 1.1 million). More than ten thousand young people in Surrey aged 5-15 suffered from a mental health disorder in 2017 (Community Foundation for Surrey, 2017), with anxiety noted as the primary reason for referral.

Mental health problems among young people are often associated with problems such as bullying, obesity, substance abuse, inequality, etc. A study in the Surrey district of Elmbridge in 2017 found that 20% of children and young people reported being bullied within the last three months (Surrey County Council, 2017). An estimated 26.7% of children aged 10-11 years in Surrey are overweight (Surrey County Council, 2016). In a study on drinking behaviour among 15 year olds in Surrey found that 19% admitted to being drunk in the past four weeks (Surrey County Council, 2016; Milne, 2015). Self-harm has been named as one of the top four health concerns for young people in Surrey, (Healthwatch Surrey & Surrey Youth Focus, 2014). Young people aged 11 – 16 are eight and a half times more likely to have self-harmed if they are diagnosed with a mental health disorder and nearly half of 17-19 year olds diagnosed with a mental health problem (46.8%) have self-harmed or attempted suicide in their lives (NHS Digital, 2017). Substance misuse is often used to try to cope with incidences of trauma or high stress, but often exacerbates emotional, social or educational problems (Surrey County Council, 2017). Most young people struggling with substance misuse (94%) (in Surrey and nationally) started struggling before the age of 15 (Public Health England, 2015). Prevention is clearly important. Interventions targeting young people before problems have established are more likely to be effective (Addaction, 2016). A relevant problem within Surrey also relates to the county's heightened levels of social inequality, which has been linked to higher rates of depression, anxiety and panic disorder (Community Foundation for Surrey, 2013).

There is considerable strain on youth mental health services, with long waiting lists and high thresholds. In Surrey, around 70% of children and young people do not get useful help at a young enough age (Surrey County Council, 2017). Young people are often least satisfied with consultations with the GP, and often have the shortest appointment times (Association for Young People's Health, 2017, p. 1). In Surrey 70% of children and young people do not receive useful help at a young enough age (Surrey County Council, 2017). Some recent data has suggested that extra funding allocated to NHS clinical commissioning groups (CCG) (£1.4 billion from 2015-2020) for CAMHS (Child and Adolescent Mental Health Services) is often used in other domains. In Surrey, the expenditure on child mental health varies from 0.60% (Surrey Downs CCG) to 1.04 (East Surrey CCG) of the total NHS budget.

## The solution

### Engaging young people with nature

Encouraging and enabling engagement with nature among young people can provide a promising affordable form of support for young people in need and can have a strong preventative benefit. There is growing evidence that engagement with nature is beneficial for mental wellbeing (Bowler, Buyung-Ali, Knight, & Pullin, 2010; Hartig, Mitchell, de Vries, & Frumkin, 2014; Triguero-Mas et al., 2017).

## The evidence

Various review papers have summarised the increasing evidence for the benefits of engagement with nature for people's health and wellbeing (Bowler, Buyung-Ali, Knight, & Pullin, 2010; Hartig, Mitchell, de Vries, & Frumkin, 2014; Triguero-Mas et al., 2017). For instance, Twohigg-Bennet & Jones (2019) conducted a meta-analysis of more than 100 studies that examined the relationship between nature-exposure and general health finding positive effects for numerous health benefits including decreased salivary cortisol, heartrate, blood pressure, cholesterol, low frequency heart rate variability, decreased risk of preterm birth, type II diabetes, all-cause mortality, small size for gestational age, cardiovascular mortality and an increased incidence of good self-reported health. Broadly three types of literature can be distinguished in the field: population-based studies, experimental studies, and evaluative research. These studies vary in their design (correlational, exploratory, evaluative, experimental) but also in the type of nature-engagement they tend to focus on (passive exposure, active engagement (walking, gardening) or therapeutic) and the population they focus on (general population or specific groups).

*Population based studies.* Research using large data sets that examine the relationship between living near nature urban greening. This is often correlational research that examines the relationship between amount of green space and health and wellbeing data. It can also include longitudinal population studies examining the effect of urban greening interventions (or the opposite). Population based studies have found reductions in mortality for those living near green spaces (Villeneuve et al., 2012) (James, Hart, Banay, & Laden, 2016). Those who moved to greener urban areas have been shown improvements in mental health, as measured using the General Health Questionnaire, benefits continued for the three-year duration of the study, suggesting they may be maintained over time (Alcock et al., 2014). Nearby nature has also been shown to help improve levels of physical activity (Ambrey, 2016a, 2016b; Bjork et al., 2008; Huang, Yang, Lu, Huang, & Yu, 2017), important for physical and mental health. Nearby nature has been associated with a feeling of connectedness to the community, indicators of wellbeing (Baur & Tynon, 2010; Cleary, Fielding, Bell, Murray, & Roiko, 2017; Groenewegen, den Berg, de Vries, & Verheij, 2006; Kweon, Sullivan, & Wiley, 1998; Larson et al., 2016; Seaman, Jones, & Ellaway, 2010; Zhang, van Dijk, Tang, & van den Berg, 2015).

*Experimental research.* Experimental studies are often conducted with healthy populations and aim to test the benefits of nature exposure in controlled settings. Research in this area tries to understand what types of benefits result from what types of exposure, for who and how. A vast number of controlled experimental studies in this area have now demonstrated that short as well as longer, active as well as passive exposure to real and virtual scenes of nature promotes recovery from stress and mental fatigue (Bowler et al., 2010; Hartig et al., 2014). Most of this is laboratory based and less of it is field experimental research or takes the form of a randomised controlled trial with specific groups. As an example of the latter Stigsdotter et al (2018) randomly allocated 84 individuals with stress related illness to either nature-based therapy or cognitive behaviour therapy and found that both had a similar and significant positive effect on psychological wellbeing which remained at 12 month follow up. Other such studies have shown that participants with Major Depressive Disorder (MDD) showed enhancements in cognitive processes (working memory), as well as increases in positive affect after interacting with nature for 50 minutes (Berman et al., 2008; Berman et al., 2012).

*Evaluative research.* Aside of experimental or controlled studies with specific groups there have also been many studies that evaluate the effectiveness of a nature-based intervention on the health and wellbeing of specific groups. Some of these studies are qualitative, aiming to provide a in depth insight into participant experiences. Studies have examined interventions such as forest bathing, horticultural science, garden and pet therapy etc. The problem with these studies is that they tend to lack a control group or randomised control. Studies in this area have demonstrated that certain types of active nature engagement such as wilderness experiences and green care can support wellbeing by providing participants with a *sense of confidence, purpose and meaning* associated with better health, wellbeing (Annerstedt & Wahrborg, 2011; Chiang, Li, & Jane, 2017; Cole & Hall, 2010; O'Brien, Burls, Townsend, & Ebden, 2011; Soulsbury & White, 2015).

Different pathways have been distinguished through which nature engagement benefits human health and wellbeing: the quality of the air, in increases in exercise, by buffering the effects of stress and through increasing socialisation (Hartig et al., 2014). According to Attention Restoration Theory (Kaplan & Kaplan, 1989) non-threatening or challenging natural environments may provide better opportunities for the recovery from mental fatigue and stress because they have contain a wealth of positively distracting features and provide people with a sense of being away (Gonzalez, Hartig, Patil, Martinsen, & Kirkevold, 2010; R. Kaplan & Kaplan, 1989; Ulrich et al., 1991). The Biophilia Hypothesis proposed by Wilson (1984) suggests that humans are predisposed to connect with nature because we are drawn towards the environments that support survival.

## Young people and nature

The benefits of nature-engagement for your people are similar to those for adults, for instance with regards to stress reduction, recovery of mental fatigue, improvement of cognitive functioning, promotion of physical activity, etc. There are also some differences related to specific needs and experiences of young people. For instance, there is extensive research on young children's play in natural environments and the influence on development of motor skills and understanding of risk. In addition, work with older children often examines development of confidence, self-esteem and resilience. As with the research described above we can distinguish literature that focuses more on accessibility and passive exposure (living near nature) and research that focuses more on active engagement, including nature-based therapy. Here we will discuss some examples of such research.

Living near nature or having access to green spaces has multiple benefits for the health and wellbeing of young people. Li et al (2018) conducted a study tracking adolescent use of environments with GPS to examine link between mood and amount of nature visited. This US study was conducted with 155 adolescents between the ages of 13 and 19 who wore a GPS tracker for four days. They also kept an activity diary and reported their mood at the end of each day. Positive mood was significantly correlated with higher exposure to green space. For adolescents, an increase in concentration of nature in their environments is associated with better mood, regardless of their demographic backgrounds. Picinni et al (2018) examined the correlation between mental wellbeing of almost 30 thousand boys and girls aged 11 to 15 in Canada and time spent outdoors. The study was based on survey data which included self-reports of time spent outdoors and experience of eight symptoms (feeling depressed, anxious, headache, backache). For girls spending half an hour per week outdoors was associated with a 24% lower prevalence of high psychosomatic symptoms (not for boys). The perceived importance of spending time outdoors associated with 24% reduction for both boys and girls suggesting a possible indirect effect via a sense of connectedness to nature.

As with adults, nearby nature can help improve levels of physical activity. Research on activity in nature often focuses on younger children and in particular, on play. Having access to nature during school for more than 20 minutes per day has been associated with five times more moderate/vigorous physical activity (Almanza, Jerrett, Dunton, Seto, & Pentz, 2012). Increased physical activities benefits physical health and activity and highlighted the benefits of nature in tackling obesity. Time spent outdoors is also “therapeutic” for sleep- and gastro- related childhood problems (Frost, 2006). Additionally, nature has been shown to help children develop an understanding of risk, allowing them to make their own judgements in an unknown environment (Frost, 2006).

Natural settings provide an opportunity for exploration and discovery, which has been shown to increase curiosity, imaginative play and sustained attention (Dowdell, Gray, & Malone, 2011). Environments with a considerable number of natural elements supports the development of motor skills in children and young people such as improvements in strength and coordination (Munoz, 2009). Features like “slopes and rocks” present children with “natural obstacles” that they need to learn to overcome (Fjørtoft, 2001). natural elements within outdoor spaces help facilitate the development of motor skills (Fjørtoft, 2001), particularly balance and coordination (Fjørtoft, 2004). Studies have shown that these ‘wild’ environments are also actually favoured by young people aged 10-14 (Elsley, 2004).

Ginsberg (2007) suggests mental health benefits for young people are augmented through allowing unstructured “child-directed play”, which encourages children to engage in their passions, make their own decisions and build resiliency. Half an hour of outdoor play a week among 11-15 may lead to a significant reduction in reported psychological wellbeing, particularly among girls (Eaton et al., 2012). These benefits may be associated in part due to increases in physical activity (Leech et al., 2002). Although there is also evidence that subjective experience of being connected to nature shows added benefit in terms of reducing sadness, irritability, nervousness and sleep problems, especially amongst boys (Piccininni et al., 2018).

A different body of research on active nature engagement has examined the effect of outdoor nature camps with “at-risk” groups of young people. This work tends to focus on older children and adolescents and has found significant positive effects of such camps on participants wellbeing. For instance, a two-week adventure therapy programme for “at-risk” young people aged 13-18 found significant improvements in reported wellbeing. Moreover, both participants and their parents reported large changes in their ability to cope with conflict, parents also reported their children seemed happier, showed fewer signs of depression, and were more motivated, empowered and capable (Dobud, 2018). Barton et al. (2016) also found significant improvement in self-esteem and connectedness with nature among 130 adolescents who participated in a wilderness expedition. In their review of adventure-therapy Berman & Davis-Berman (2009) conclude that participation in wilderness programs has been shown to benefit adolescent’s self-concept and social skills and can reduce psychiatric symptoms and reduce alcohol and drug use; although potential benefits for suicide rates, depression, respect for authority and academic success needs further research.

Self-regulation is a specific psychological construct studied in relation to nature engagement among young people. Self-regulation is a multidimensional construct associated with depletable psychological resource. It is an important resource linked to self-control and young people’s ability to ignore internal and external distractions. A meta-analysis of 15 correlational and 16 experimental studies conducted by Weeland et al (2019) evaluated the strength of evidence for a correlation



between nature engagement and self-regulation among children between the ages of four and twelve. Small but consistent positive effects were found. These were not influenced by demographic differences.

Nature benefits young people's wellbeing through active engagement as well as passive exposure. Greenwood & Gatersleben (2016), for instance, found greater recovery of induced stress among teenagers when resting in an outdoor natural courtyard than when resting in an indoor space. This study also found that the benefits were greatest when experienced with a friend. Other studies have shown that nature exposure helps to provide young people with a space to release tension and aid self-regulation (Korpela, Hartig, Kaiser, & Fuhrer, 2001). Views of nature have also been associated with reduced levels of stress and increased ability to focus as well as improved attention allowing them to better think through their problems (Wells, 2000; Wells & Evans, 2003).

Aside from the physical and emotional wellbeing benefits of engagement with nature evidence also demonstrates positive effects on cognitive development and learning. Regarding education and learning, nature has been shown to improve cognitive functioning (Dreissnack, 2009) as well as providing a number of alternative educational benefits (O'Brien and Murray, 2007) such as higher levels of creativity and language development. Other studies have demonstrated a link between the natural environment and improved ADHD symptoms, which may be associated with an increase in concentration levels (Taylor & Kuo, 2009; Taylor, Kuo, & Sullivan, 2001). Children with ADHD who play regularly in green play settings have been shown to have milder symptoms than children who play in built outdoor and indoor settings (Taylor et al., 2001). Moreover, activities based outdoors were shown to increase ability to concentrate in children aged 5 – 18 years old with the disorder, regardless of age, gender or income (Kuo & Taylor, 2004)

It is evident that nature engagement has significant benefit on health and wellbeing of young people as it has on adults. Several review papers have summarised this evidence. Roberts et al (2019), for instance, conducted a systematic review of studies evaluating the effect of direct nature activities on wellbeing of children (up to 12) and adolescents (12-21). They only included studies that focused on outdoor engagement (not passive exposure) but excluded therapeutic interventions. In total 14 studies were included: 6 quantitative and the rest qualitative. Positive findings were found for benefits on self-esteem, confidence, mood, stress reduction, social benefits, resilience. However, it was also concluded that the evidence was relatively weak due to lack of randomisation and control of intervening variables in most studies. Tillman et al (2018) also called for more evidence and controlled studies. They reviewed a broader range of 35 papers examining the relationship between nature engagement and wellbeing among children between the ages of 0 and 18; looking at accessibility, exposure as well as engagement. They found positive results for half but not all papers for emotional well-being and attention deficit disorder/hyperactivity disorder, overall mental health, self-esteem, stress, resilience, depression and health-related quality of life.

Engaging with nature is clearly beneficial for the wellbeing of young people. These benefits are associated with recovery or restoration from stress and attention fatigue, improved cognitive development, facilitation of social contact, promotion of healthy child development, and promotion of personal development and sense of purpose. Gill (2014) concluded that spending time in nature should be part of a "balanced diet" of childhood experiences and promotes health development, wellbeing and environmental values. Capaldi et al (2015) concluded that contact with nature is important to help children to flourish.

## Opportunities and barriers

Promoting and supporting nature-engagement among young people can be hugely beneficial. But it requires availability of accessible suitable natural areas and young people's the ability and motivation to engage with those natural resources. This is not always easy.

There are huge inequalities in the use of green space and accessibility to those spaces. The 20% most affluent wards in England have five times as much green space than the most deprived 10% (CABE, 2010). Moreover, people from deprived areas or minority groups tend to access natural or green environments much less frequently than individuals with a higher socio-economic status (Roe, Aspinall, & Ward Thompson, 2016).

The benefits of exposure to green space may be stronger for young people who are more vulnerable or at risk. Vulnerable young people have greater needs and more to benefit. Larger physical and psychological benefits of green space exposure have been found for individuals with low socio-economic status or with less than ten years of education (Twohig-Bennett & Jones, 2018). Moreover, urban greening has been shown to reduce the link between income deprivation and cardiovascular mortality (Mitchell and Popham, 2008).

Various types of disability also present added challenges regarding access to nature. A report by Natural England in 2008 revealed that, although much improvement has been made since the Disability Discrimination act in 1995, many natural areas are inaccessible due to additional needs. Improvements such as flattening pathways, providing ramps, wooden seats, handrails and steps, widening footpath bridges and making gates easier to open (especially one-handed) were all cited as necessary to increase the number of disabled individuals accessing nature (Natural England, 2008).

Nature is especially important during the transition from adolescence to adulthood, as it helps youth explore their place in the world (McMahan, 2015; Arnett 2006, 2007). Unfortunately, adolescence is known as a time in which physical activity levels often drop considerably. Nader, Bradley, Houts, McRitchie and O'Brien (2008) conducted a study with 1,032 young people and found that the average nine-year-old spent 4 hours a day engaged in moderate or vigorous exercise. This value dropped to 49 minutes per weekday and 35 minutes daily at the weekend when the child turns 15. The considerable decrease resulted in only 31% of 15 year olds meeting recommended daily exercise guidelines on weekdays, dropping to 17% at weekends, compared to almost all 9 year olds meeting the recommendations (Nader, et al., 2008).

Despite the significant evidence for the benefits of nature engagement not all young people like to go outside. Bixler and Floyd (1997) found that around 10% of the young people they examined during outdoor nature camps did not enjoy the experience at all, which prompted them to develop the disgust sensitivity scale. Some children may experience woodland as scary, leading to feelings of anxiety or claustrophobia or view woodland as a place of increased risk of attack. The way in which children and young people connect with nature may change over time.

It has been suggested that young people's connectedness to nature is decreasing. This is problematic because connection to nature has also been positively correlated with subjective wellbeing and happiness in both children and adults (Piccininni et al., 2018; Wood & Smyth, 2019; Zelenski & Nisbet, 2014). Richardson et al (2019) demonstrated that a sense of connectedness to nature is significantly lower at age 15 than it is at age 7, although it then begins to increase slightly from 16-18 years old to 31-40.

There have been suggestions that the level of engagement with nature among young people has been declining due to changes in lifestyles, parental concerns and cultural changes. A government survey (Natural England, 2019) revealed 78% of young people under the age of 16 accessed the outdoors with an adult in 2013/14, in 2018/19 this was 72%; the percentage spending time outdoors on their own declined from 22% to 17% in the same period. Parental fears may play a key role (Munoz, 2009). Particularly as many hold the belief that society is more dangerous now than when they were younger. The concept of “stranger danger”, the fear of others in society harming their children, has been cited as the greatest parental concern (Moss, 2012). Louv (2008) also notes that young peoples’ lives are becoming busier and more structured, which facilitates the transition from direct experiences of nature, to indirect experiences, such as via media.

## Nature in Surrey

Surrey is one of the most wooded counties in England. Woodland covers 22% of the county, but heathland, chalk downland and farmland are also particularly characteristic. It is a highly valued landscape with over 25% of the county being designated as Areas of Outstanding Natural Beauty (the Surrey Hills and the High Weald AONBs). It contains extensive areas of high biodiversity value and internationally important habitats. Surrey clearly contains a wealth of natural resources that can provide great benefits for the health and wellbeing of those living and working there, as well as those visiting.

England 10 National Parks and 34 Areas of Outstanding Natural Beauty (AONBs), attract more than 260 million visitors a year and are home to over 2.3 million people. In May 2018 the government asked for an independent review into whether the protections for National Parks and AONBs are still fit for purpose, 70 years after Parliament decided to preserve some of England’s finest landscapes and help people visit and enjoy them. The Glover report was published in September 2019. The report focuses on five areas and provides 27 proposals for the future of AONB’s. One of these five areas is “Landscapes for everyone”, which focuses on human experiences with nature and human health and wellbeing. One of the proposals under this theme is “Proposal 8: A night under the stars in a national landscape for every child”.

Ensuring that every child has this experience and that every young person can experience the benefits of “our natural health service” work needs to be done. The 2017/2018 MENE report reported that 72% of children under 16 years old were likely to access urban greenspaces, compared to 36% who go to the countryside. Accessing the countryside is not always easy, especially not for young people, who may want to be independent but have not yet got the opportunities and abilities to be independent enough to visit the Surrey Hills. Young people are likely to need support as they lack opportunities, abilities and motivations to access the Surrey Hills on their own. This will be particularly true for young people from disadvantaged backgrounds.

A review was carried out in Surrey to explore what organisations are currently present in the county that take young people out into nature, what opportunities there may be to expand these opportunities and what is needed to do so.

## Opportunities and barriers in Surrey

An online search was carried out to identify Surrey-based groups and record their email address using the contact information on their website. Additionally, information sites about the services

available in Surrey (i.e. Surrey Local Offer and Surrey County Council Family Information Service) were utilised to collate additional contacts. Further contact details were gathered via personal contacts. We searched for four types of organisations in Surrey: youth groups that provide a nature-based experience or activity, 2) other youth groups, 3) groups that take young people outside (not necessary to engage with nature), and 4) groups that provide nature-based experiences or activities but are not limited to young people.

This search identified around 30 organisations in Surrey that provide a wide range of nature-engagement activities with young people (type 1) including youth organisations that took young people out walking in the Surrey Hills or camping in Wales, organisations providing respite and educational and leisure facilities for disadvantaged young people in Surrey, forest schools, outdoor adventure organisations, allotment projects, health care farms, conservation and wildlife organisations, nature and art groups, nature therapy, camping facilities, yoga trips, adventure therapy and many more. We also identified more than 100 organisations working with young people who did not specifically aim to take young people out into nature as well as around 80 organisations where being outdoors played a role, but nature-engagement was not central to the activity activities (mostly sports organisations).

A short survey was sent to each of these organisations asking respondents about their experiences with taking young people outdoors and their views on what may be needed to increase these facilities are needed to expand their offerings. In addition six interviews were carried out with the founder or CEO of selected organisation. These interviews are described in detail in Lebus (2019).

## Survey results

In total, we received 40 responses but only sixteen were fully completed. The respondents were from a range of organisations of varying sizes providing services from 15 young people a year, to over 5 thousand (sports club (2), after school activity (2), mental health charity (1), other charity (5), education (1), youth group (2) and local council (3)). All the organisations use the outdoors in their work with young people and for most (10) this was at least partly related to conservation activities.

*Benefits for young people.* The participants overwhelmingly agreed spending time in nature helps young people cope with stress, boosts self-esteem, is good for their health and mental health, promotes independence, and physical activity. The majority also agreed it promotes cooperative behaviour, reduces anxiety, and promotes creativity and concentration.

*Advantages and challenges for the organisation.* Figures 1 and 2 show that almost all respondents tended to agree that taking young people outside has benefits for their organisation and themselves (fun, rewarding, etc) and they disagreed with the majority of disadvantages (not appreciated, pointless, dangerous). Although most did agree it is challenging and four people (a quarter) agreed it is expensive and a hassle.

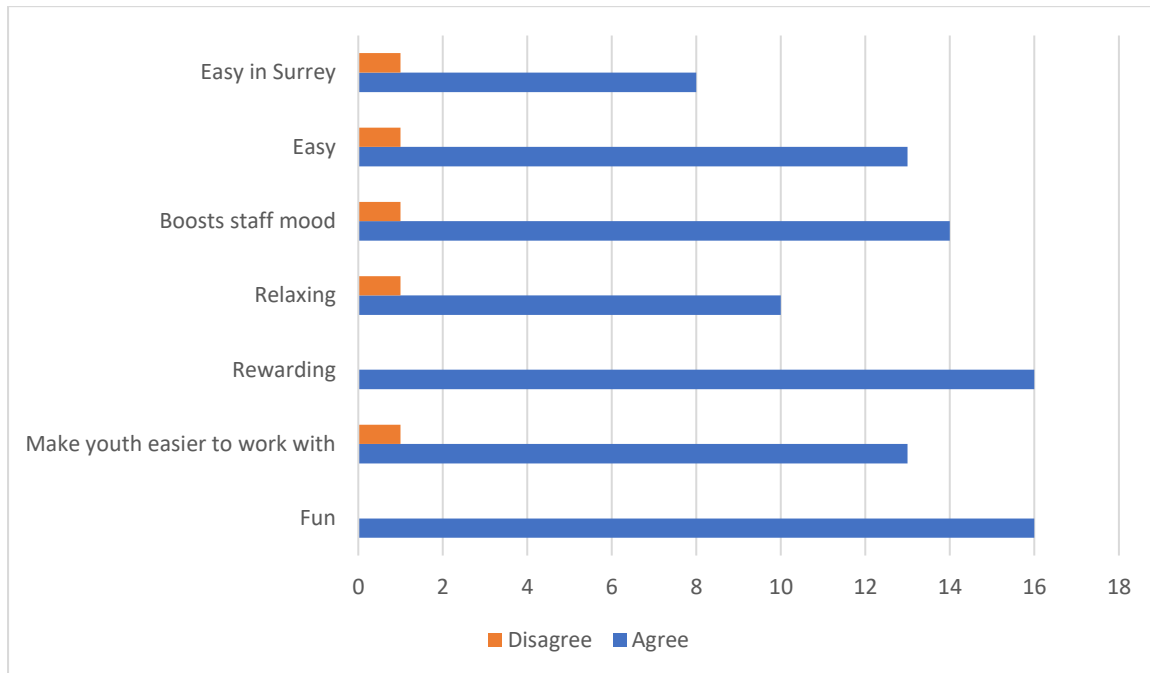


Figure 1. Number of respondents who agree or disagree with various benefits of nature-engagement with young people (Totals do not add up to 16 as neutral responses are not included).

These perceptions were supported by the interviews conducted by Lebus (2019). In which representatives of different organisations that provide outdoor activities in Surrey (with adults or young people) reflected on similar benefits.

*“Nowadays it seems like we are always trying to fit into a box. Whether that is defined by a diagnosis, a gender, a sexual orientation, a class, an age, where you live... Nature is accessible for everyone, and allows you to escape these boxes.”*

*“Nature is always there – it doesn’t go away”.*

*“They love looking at the views at the top of Pitch Hill, for example, it is a really awe-inspiring experience”*

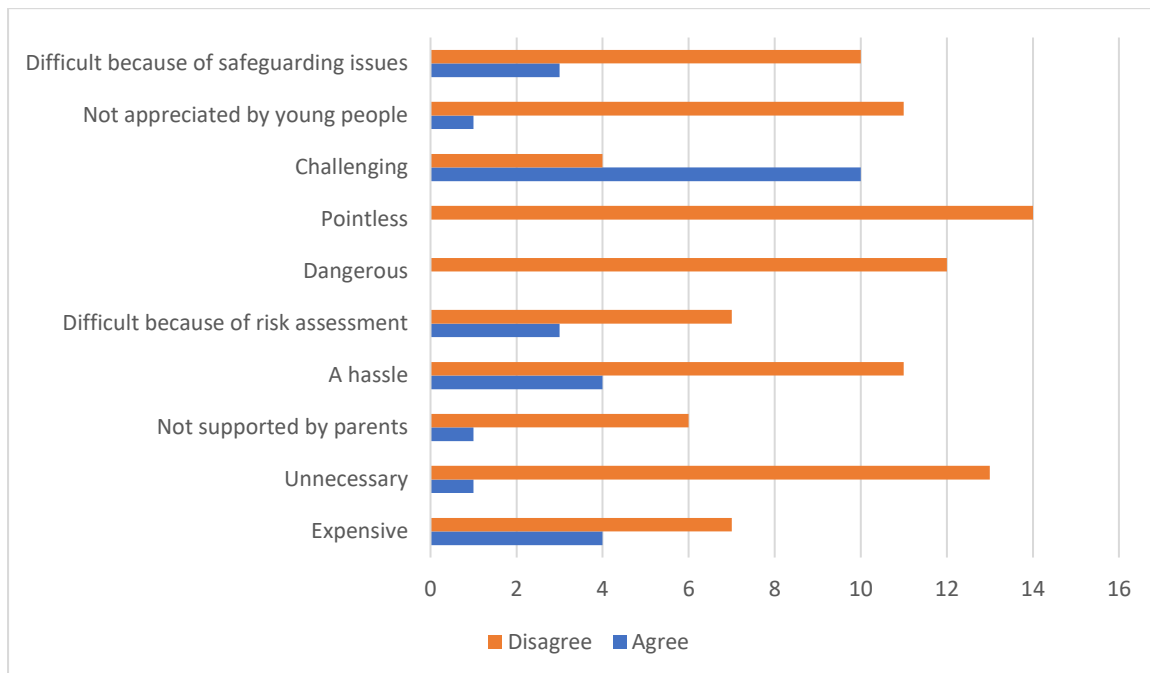


Figure 2. Number of respondents who agree or disagree with various disadvantages of nature-based activities with young people (Totals do not add up to 16 as neutral responses are not included).

When asked in the survey whether the organisations would like to take (more) young people into nature (more often) they tended to say “yes”. Activities that were selected to do more frequently were: skills-based activities (chosen by 9 participants), active exercise (7), mindfulness-based activities (6), orienteering skills (4), walking (4), educational activities (5), conservation (6), arts (6) and activities with animals (5) and camping (4).

The survey also asked whether the organisations would be willing to take a group of disadvantaged young people into the Surrey Hills to which most of them said yes (11). Finally, the respondents tended to agree that most of their young people would benefit from spending a night under the stars. This question was asked in response to the recommendation given in a recent government report reviewing the future of AONB’s which suggest that all young people have the right to spend a night under the stars (Glover, 2019).

*Needs.* Although respondents were motivated to take (more) young people out into nature it was also evident that this is not easy to do. To assess what might be needed they were asked two questions. First, they were asked which of nine things would help them bring (more) young people into the natural environment (more). Second, they were asked to write down in three open question what they would need to take more young people outdoors, to take their young people to spend a night under the stars and to take a group of disadvantaged young people into the Surrey Hills.

In response to the first closed question Figure 3 shows that funding and volunteers were the top answers, followed by increasing awareness of the benefits of nature engagement among parents and young people themselves.

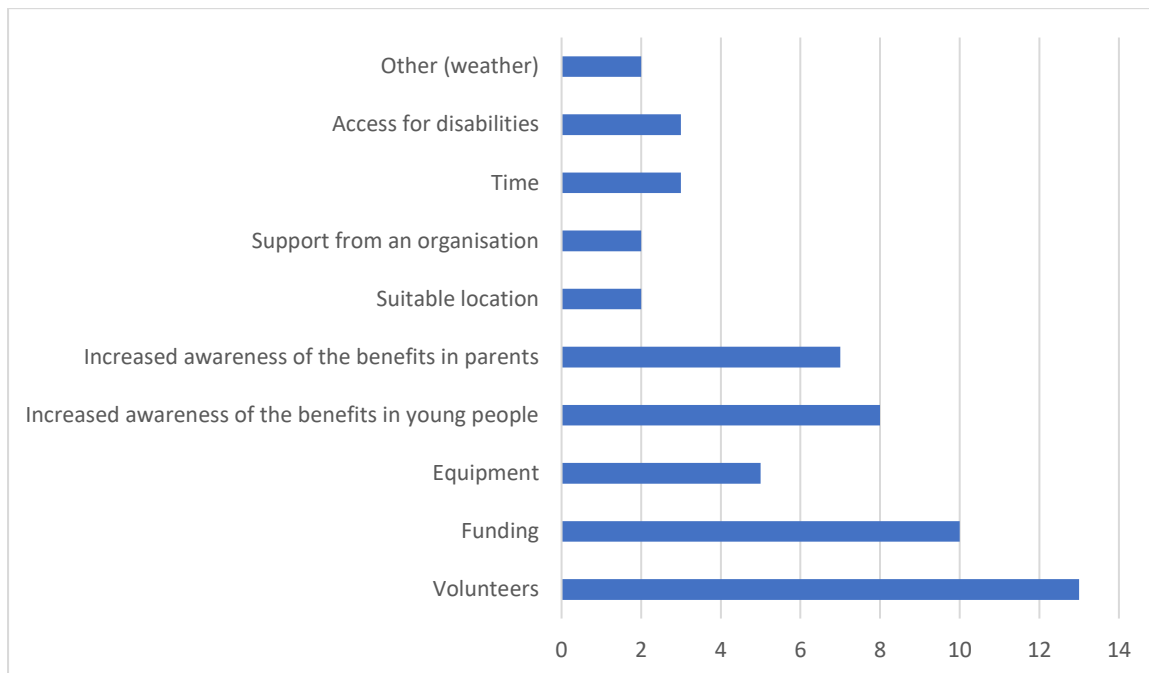


Figure 3. Responses to the survey question asking what would help them to bring young people into the natural environment?

Responses to the open questions were evaluated and grouped. The results are summarised in the Table below. Again, the key themes that resulted from the respondent's answers were funding and volunteers. Transport also came out as a clear theme as well as access to suitable environments. Finally, training was mentioned by several respondents as well as a need to work together.

Table 1. What is needed to take (more) young people into nature (the hills, under the stars)?

<b>Theme</b>	<b>- Example comments</b>
Volunteers	<ul style="list-style-type: none"> <li>- Volunteers to transport and help with small groups once we get out into the country</li> <li>- Volunteers and training of same</li> <li>- Referral, volunteers, funding</li> <li>- Volunteers and funding</li> <li>- Volunteers</li> <li>- Staff</li> </ul>
Transport	<ul style="list-style-type: none"> <li>- Transport</li> <li>- Cheap transport and a clear activity once you arrive</li> <li>- Transport is very important. As an organisation we do not own a minibus so heavily rely on the good will of schools to loan us their transport.</li> </ul>
Support	<ul style="list-style-type: none"> <li>- Staff who are willing to be outside</li> <li>- A partnership organisation - to work in collaboration to share skills/ equipment/ staffing - not able to do it on my own!</li> <li>- Develop more local links as knowing each other's organisations is key to going forward</li> </ul>

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Funding	<ul style="list-style-type: none"> <li>- Funding</li> <li>- We are a charity ... run and managed by volunteers ... we are always faced with a tension between supporting groups in need and raising finance. Our main needs are finance and tools. We have expanded our provision to five days a week which means more fuel, travel costs and so on.</li> <li>- Funding is also a huge factor. As we are a charity we are constantly having to find funding to run anything. We try to run our projects at no cost to the young people we are working with. This is because we work with disadvantaged young people and do not want money to be a barrier to accessing projects.</li> </ul>
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Environments	<ul style="list-style-type: none"> <li>- Easy access as many of our members are physically disabled</li> <li>- Safe, supervised locations with facilities</li> <li>- We would need a site where this was permitted</li> </ul>
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One additional comment referred to the importance of building confidence and providing sufficient support for the young people themselves.

*“We would need to do several sessions beforehand to build up their confidence and overcome perceived barriers”*

Similar results were found in the interviews conducted by Lebus (2019).

*“lots of young people are unfamiliar with the outdoors, so it is unknown, and seems scary”*

*“there are so many misconceptions about the countryside, so it is nice to be able to debunk those myths and see young children getting excited about a pond of creatures that they didn’t realise existed”*.

Taking young people out into the Surrey Hills or to spend a night under the stars clearly needs additional support; it requires more than nearby natural resources. To enable all young people to visit the Surrey Hills and experience it’s healing potential they need support. Fortunately, the organisations that were interviewed and participated in the survey were all highly motivated to provide this support. These organisations have the knowledge and expertise to run events in the right way to ensure young people can benefit from the natural health services of the Surrey Hills. However, to ensure that they can help make sure that “every child can spend a night under the stars”, they need support. They need funding, volunteers, transport, equipment and accessible suitable natural places to visit.

## Conclusion

It is evident that more should and can be done to meet the needs of young people in Surrey. A large variety of disadvantage exists in the county, from local wards in which almost 50% of children live in poverty (End Child Poverty Coalition, 2019), to the prevalence estimates of young carers at 14,000 people (Surrey County Council, 2017). It is hard to determine a simple way to target all of the areas of need in the county, and a ‘one size fits all’ approach is impractical and unlikely to be work. However, focussing on promoting mental wellbeing is likely an effective way in which to alleviate many of the distresses caused by adversities.



Academic literature has identified several advantages of engaging with the natural world. In addition to the physiological benefits of encouraging physical activity and boosting immune response, natural environments are successful in moderating the symptoms of low mental wellbeing. For example, nature's restorative qualities significantly reduce feelings of stress or mental fatigue and allow people to escape the pressures of daily life (Alcock et al., 2014; Ambrey, 2016a, 2016b; Bjork et al., 2008; Cohen-Cline et al., 2015; Greenwood & Gatersleben, 2016; Huang et al., 2017; Kaplan, 1995; Korpela et al., 2001; Kuo, 2015). The outdoors also provides the opportunity for quiet reflection, as well as exercise, social groups or educational/skills sessions that boost self-esteem and confidence (Framework Housing Association, 2014). Furthermore, nature helps build resilience, through encouraging young people to engage with an unpredictable environment in which they have to assess risk, make independent decisions and learn to adapt to their surroundings. Resilience is considered essential for preparing young people to cope well in life (Moss, 2012) and is increasingly prioritised in government and youth sectors. It is therefore no surprise that it is often one of the key areas of improvement deemed necessary in strategies designed to improve the lives of disadvantaged individuals, particularly with regards to mental health (Children's Commissioner, 2017; Surrey County Council, 2017; University of Essex, 2013).

These findings are only just beginning to be acknowledged by mainstream media and policy. For example, the recent Global Wellness Summit report (2019) discussed the significance of using nature for health, suggesting that there is sufficient evidence to support this effort. It stated that "the world is unlikely to slow down anytime soon, so individuals must", urging people to go outside and experience the "priceless" rewards and balance that nature has to offer.

Yet, the benefits can only be realised with the introduction of initiatives that promote and enable usage of the outdoors in Surrey. There are several projects, that currently work to do this. From nurture farms, to camping expeditions, and outdoor therapies, the list of potential ways in which to engage young people is endless. From interviewing members of nature-based organisations in Surrey for the case studies, it became clear that the needs of different groups of vulnerable individuals vary dramatically, and what may appeal to one, would not to another. In addition, the evidence base of studies comparing individuals or engagement types is not comprehensive enough to generate an informed decision on what works best. Instead, focus should be on targeting the key obstacles that are currently preventing young people utilising the outdoors for personal health and wellbeing.

For example, from the perspective of academic literature, as well as the views and opinions of nature-based organisations and youth workers, a main barrier was the lack of education. Most people seem unaware of the benefits that nature can provide, or the negative consequences of departing from it. This has led to parent restrictions, societal rules, a blind acceptance of a technological way of life, and even a fear of the outdoors. It is therefore evident that greater awareness is needed, to highlight the importance of engaging with nature, and hopefully incorporate it into mainstream culture. In addition, another key barrier emphasised by local organisations was a lack of funding into relevant projects and interventions. Money is required to pay for equipment, volunteers and transport to help facilitate nature access, so more investment is needed in organisations that currently do/would like to take young, disadvantaged people outside. This would also help reduce the impact of accessibility constraints due to lack of local green space, suitable amenities (i.e. for certain cultures or disabilities) or means by which to travel to natural areas. Funding would allow organisations to expand and reach more of those who need help.

So, in summary, we can conclude that nature is an appropriate suggestion for helping to reduce suffering in our community and lessen the impact of certain key types of vulnerability for local young people. Through promoting social activities, physically healthy habits and enabling mental restoration and development, it is a simple, sustainable way in which to set young people up for a prosperous future. The use of nature is particularly relevant within the county of Surrey, which has so much natural beauty and green landscape to offer. The Director of the US Centre for Disease Control and Prevention's National Centre for Environmental Health said in 2008, "we need more research on the relationship between nature experiences and health" but "we know enough to act" (Charles, Louv, Bodner & Guns, 2008). A decade later, the significance of this message is still apparent. We may not have all the scientific answers yet, but the coherence of the current literature, as well as anecdotes and opinions of professionals in the youth or outdoor sector, all point towards nature as an invaluable tool to boost wellbeing. We have the need, and we have a solution, we now need to act and bridge the gap between the two.

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