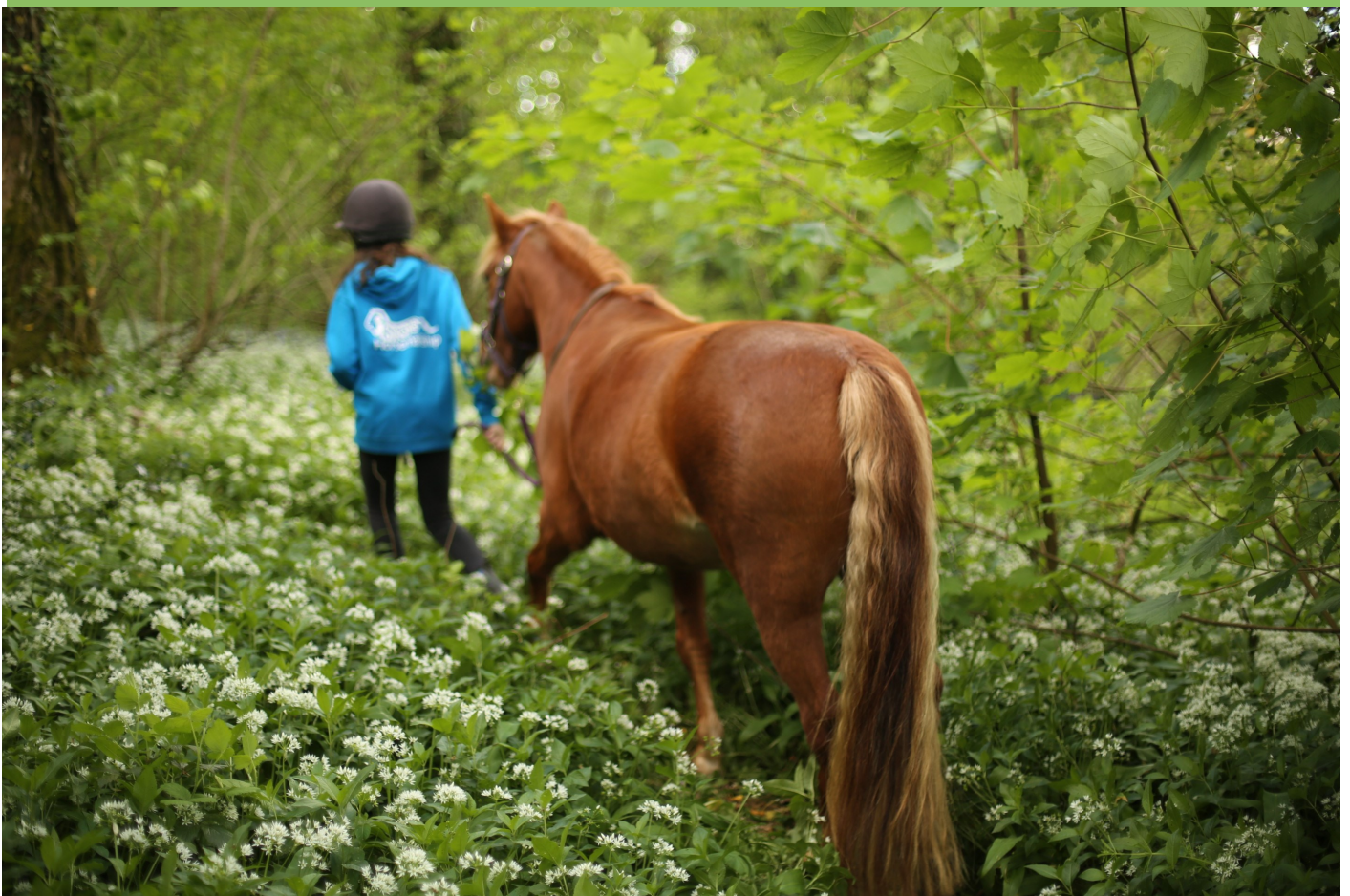




Nature-Based Activities

6-week Pilot Project

December 2019



Changing Lives with Nature-Based Activities

Sirona Therapeutic Horsemanship CIO



Nature-Based Activities 6-week Pilot Project at Sirona Therapeutic Horsemanship – December 2019

Introduction

Sirona Therapeutic Horsemanship pioneered our new Nature-Based Activity (NBA) sessions for 6 weeks during Autumn term 2019. These are an additional intervention to our equine-based sessions at Sirona for young people to benefit from time spent in nature and learn about our natural environment. Four young people attended the NBA pilot project with referrals of ADHD, Autistic Spectrum, young carer, social, emotional and mental health issues, and school challenges, or not attending school. The sessions were led by Angie Whitehead, Level 3 qualified Forest School leader, supported by Kate Ford, BA Social Work, and Alex Goswick, volunteer.

The young people were involved in the planning, development and design of the sessions and the area in the small woodland which is situated adjoining the Sirona stable yard. The young people helped to build and create the space according to their ideas and needs. The space comprises of a green woodworking area, mud kitchen, fire and kitchen area, weaving and art space and hammock area.

Some time with the horses and ponies was also included in some of the NBA sessions, such as introducing our Equine-Based Mindfulness (EBM) exercises to the young people, and introducing the ponies to the woodland area. Being able to incorporate equine activities into the sessions is a unique aspect of our NBA sessions at Sirona, and useful in engaging young people into some of the educational activities such as learning about what the ponies eat out of the hedgerows for example.



Evidence Base

The evidence for the benefits of nature on mental and physical health are numerous with doctors starting to prescribe nature to patients under the social prescribing programme (nhsforest.org/green-health-routes). It is claimed that if you spend 90 minutes of your day outside in a wooded area, there will be a decrease of activity in the part of your brain typically associated with depression. Spending time in nature not only reduces blood pressure, anxiety, and increases happiness, but it also reduces aggression, ADHD symptoms, improves pain control and boosts the immune system (Environmental Research 166 (2018) 628–637).

Some of the evidence reported concludes that;

- * 30 – 60 minutes of sunlight exposure can help improve sleep patterns**
- * Blood pressure lowers after just 15 minutes outside**
- * 90% of people report increased energy and less exhaustion when outdoors**
- * 20 minutes outdoors give the same energy boost as a cup of coffee**
- * When you go for a woodland walk levels of the stress hormone cortisone are reduced 16% more than if you walk through an urban area**
- * Spending 1 hour outdoors in nature causes a 20% boost in short term memory and attention span**
- * Just 5 mins of outdoor exercise in a green space is enough to significantly lift mood**

In a study on the psychological effects of ‘forest bathing’ the Japanese practice of spending time in woods, 498 healthy volunteers were surveyed, twice in a forest and twice in control environments. The subjects showed significantly reduced hostility and depression scores, coupled with increased liveliness, after exposure to trees. The researchers wrote, “accordingly, forest environments can be viewed as therapeutic landscapes.”

For many young people who are now alienated from the natural environment and spending more time indoors on screens, having the opportunity to be outside in nature is argued to be more essential than ever for their health and well-being. It is hoped that providing Nature-Based Activity sessions at Sirona for young people who experience a range of disadvantage and disability and who are disengaged from nature, will provide increased health and well-being, social and emotional benefits and a greater interest and appreciation of the natural environment.



The Nature-Based Activity sessions

Over the pilot project the young people engaged in various activities. These included:

Stone age fire safety and lighting using flint and steel

Green woodworking such as tree cookies and spoon carving

Cooking on the fire such as vegetable soup, chocolate bananas, marshmallows, bacon and sausage sandwiches

Art activities such as leaf printing, Christmas tree cookies, Christmas wreaths, and clay faces

Team games

Mud kitchen

Foraging with tree and plant identification.

Den and shelter building and knots

The young people formed positive relationships with each other and the Sirona staff and volunteers within the sessions. This is due to many of the activities encouraging communication, team work and problem solving, together with the benefits of being outside in the natural environment, with its more relaxed and informal setting than a traditional classroom.

A unique element of the NBA sessions at Sirona is the inclusion of horses and ponies at the start of the sessions, such as a 'meet and greet' where the young people can learn to regulate their behavior by learning about horse behaviour.

Outcomes of the activities

Tool activities: encourage fine motor skills, planning, self-awareness, independence, confidence, responsibility, trust, listening skills and managing risk.

Shelter and den building: creates a safe individual or group space which provides comfort and shelter from the elements. A wide range of skills are involved such as developing teamwork, social skills, problem solving, language, planning, and also physical skills and health benefits.

Fire activities: The participants learnt responsibility for their own safety and to manage risk themselves by following safety rules and correct procedures. This builds trust – both in the participants building trust in the leaders and the leaders putting trust into the young people by enabling them to participate, thereby increasing confidence and self-esteem and improved social connections.



An example of a participant doing tool work.



Examples of participants Christmas cookies made out of wood and painted.

Feedback from the participants and parents/carers.

Feedback from both the young people and parents/carers has been very positive.

Young people recorded their feedback on leaf shaped paper they created which was then hung up in the woodland to share with each other. Some examples of feedback from the young people from their sessions includes the following;



Feedback from parents/carers included;

"The nature-based activities has had an amazingly positive impact on my daughters life, the fresh air, using all her senses, to see her anxiety levels drop and be excited to join in is so wonderful to see."



"Her anxiety levels are reduced; she has more confidence and pride in herself since learning new skills like fire building and cooking."

"being outside and connecting with nature has also benefited her quality of sleep as she usually struggles with this."

"He is so happy, relaxed and enthusiastic and can't wait to go every week. He feels like he can be himself and is truly heard in a safe supported environment."

"Her confidence has greatly increased since attending the nature-based sessions."

Angie Whitehead, Certificate in Education and Training, Level 3 Forest School Leader, Certificate in the Therapeutic Forest.

References:

Amoly, E., et al. (2014). Green and Blue Spaces and Behavioral Development in Barcelona Schoolchildren: The BREATHE Project. *Environmental Health Perspectives*, 122(12), pp.1351–1358

Knight, S. (2011). *Forest school for all*. London: Sage Publications.

Louv, Richard. (2005) *Last child in the woods: saving our children from nature-deficit disorder*. Chapel Hill, NC: Algonquin Books of Chapel Hill

Masten, A., Best, K. & Garmezy, (1990) 'Resilience and development: contributions from the study of children who overcome adversity', *Development and Psychopathology*, vol.2

Shinrin-yoku: (2019) *The Medicine of Being in the Forest*. <http://www.shinrin-yoku.org/shinrin-yoku.html>

Twohig-Bennett, C. and Jones, A. (2018). The health benefits of the great outdoors: A systematic review and meta-analysis of greenspace exposure and health outcomes.

Environmental Research, [online] 166, pp.628–637. Available at: <https://www.sciencedirect.com/science/article/pii/S0013935118303323> [Accessed 24 Nov. 2019].



Sirona is a registered charity (Charitable Incorporated Organisation; CIO) and would not be able to operate without help from many people, companies and organisations. Listed below are those we wish to thank for helping fund the Nature-Based Activities at Sirona.



Address: Buckhams Stables, Old School Farm, Dartington Hall, Totnes, Devon, TQ9 6EB

Email: info@sironaequine.org.uk Telephone: 01803 868779