ABSTRACT

Society has become more dependent on technology and less in touch with the natural world. Many of our nation’s youth no longer understand nature and view natural areas as messy. There is a lack of appreciation for and understanding of nature. Changing children’s interaction with nature and its processes offers a significant opportunity to address this problem.

This study explored the features required by a nature education center to be interactive and engaging for children. It looked at the aspects of natural areas that contribute to the negative perception of such places. Finally, it explored how six basic geometric patterns (sphere, polygon, meander, spiral, branch and explosion) and Fibonacci numbers can be applied in the design to facilitate the engagement, understanding, and positive perception of nature.

This was accomplished by evaluating case studies and reviewing literature regarding: landscape preferences and perceptions, aesthetic theories pertaining to natural area design and the geometric patterns found in nature.

This research resulted in the design of a nature education center intended to teach visitors about nature’s six basic geometric patterns and Fibonacci numbers by employing them as design elements throughout the center. These patterns were used to create a design that translated nature into something that no longer appeared messy and unkempt to visitors.