Children in Nature: An Exploration

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Two peas in an iPod: Why children and nature are no longer in sync and how public schools can change that

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ABSTRACT: This essay considers the plausible solutions to a social condition called nature deficit disorder, a prevalent problem with the youngest members of society. Nature deficit disorder is linked to physical health issues like childhood obesity, asthma, and pre-diabetic symptoms. Research has also shown that nature deficit disorder leads to mental and emotional health concerns like ADD, ADHD, depression, and stress. Whether this increasingly common condition is due to the media’s portrayal of violence, urbanization, parent-guardians’ fears of an unsafe environment, or children’s and teen’s overuse of technology; the youth of the nation are spending less time outside. Nature deficit disorder does not discriminate; it affects individuals of varying ages, genders, races, regions, and socioeconomic statuses. There are numerous suggestions to addressing nature deficit disorder—some more adaptable than others—the overarching solution that this essay points to is the public education system. Incorporating nature appreciation and environmental education into each level of public schooling would create a healthier generation of children, foster a happier, hands-on community, and start a positive trend that can continue far into the future.

KEYWORDS: children, climate science, curriculum development, environmental education, nature, nature appreciation practices, nature deficit disorder, nature in the classroom, public school systems, teens
Introduction

*We must educate ourselves and reconnect with our community in order to have a lasting effect.*

For older generations, it is easy to think back to a childhood filled with adventure and exploration in the outdoors. Nature once served as one of the main sources of entertainment to the children of generations past. But in the last two decades, many societal changes have occurred that prevent today’s youth, as a whole, from developing a healthy and unbreakable bond with nature. This relationship between nature and children has been a popular topic in research; in fact, many studies have led to a similar conclusion: regular exposure to nature helps children and teens form a healthy and happy lifestyle. A 2005 national best-selling book titled *Last Child in the Woods* by Richard Louv explores the relationship that exists between children and nature and discusses the results of a nature-deprived generation. Nature can improve mental and physical health, stimulate creativity and imagination, and lower the likelihood of stress and depression. His book coins the term, nature deficit disorder, a social condition which he describes as “the human costs of alienation from nature, among them: diminished use of the senses, attention difficulties, and higher rates of physical and emotional illnesses” (2005).

As this condition becomes more and more common, society will be faced with a difficult situation: how to teach new generations to love and appreciate their natural surroundings.

In order to find a fitting solution to nature deficit disorder, critical questions must be asked: What has research revealed about the mental and physical characteristics of nature deficit disorder? Why is society suddenly faced with this wide-spread social condition? How have the suggested solutions failed to fix it? And, could public schools be the key to solving this epidemic?

**Section I: Mental and physical characteristics of nature deficit disorder**

*Children and teens are not exploring less, rather they are just exploring different things outside of nature.*

Children and teenagers, who should ideally be active and healthy, are falling victim to the physical effects of nature deficit disorder. These types negative effects are seen on an increasingly regular basis by specialists like Kyle Morrison. Morrison is an exercise physiologist who works with obese children and teens in the

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Healthy Weight Center at the Helen DeVos Children’s Hospital in Grand Rapids, Michigan. He sees the effects of nature deficit disorder in his practice every day: “the result [of nature deficit disorder] is teenagers with obesity and related health problems, including pre-diabetic symptoms and sleep apnea” (Matthiessen). Many of these children and teens also have asthma, a condition that Morrison believes “is exacerbated by lack of exercise and lack of exposure to allergens they would routinely encounter if they spent more time outside” (Matthiessen). These are just some of the examples of the physical effects of nature deficit disorder. Often times, the effects are tangled together in a web of cause and effect; rarely does a child experience just one of the negative consequences, it is usually a combination.

Nature deficit disorder is also characterized by a lower rate of Vitamin D production. Vitamin D synthesis occurs when the skin is exposed to the sun’s ultraviolet rays. The presence of Vitamin D promotes the absorption of calcium and phosphorous and facilitates a healthy immune system. These functions are especially important to children whose bodies are still in the developing stages. Getting enough vitamin D is essential for healthy bones and teeth; it also improves resistance against certain diseases (Krucik). In fact, if a body does not get enough vitamin D, it is “at risk of developing bone abnormalities such as osteomalacia (soft bones) or osteoporosis (fragile bones)” (Krucik).

In addition to the above-mentioned physical effects there is a wide array of mental and emotional health concerns tied to nature deficit disorder. A study by Nancy Wells, an environmental psychologist who researches the impacts of the natural environment on humans finds that a close proximity to nature on a regular basis can increase a child’s ability to focus (2000). This means that, not only does spending time outside create healthier bodies, but it can also create healthier minds. This therapeutic exposure to natural settings for people with attention and focus difficulties is called ‘green space therapy.’ It was designed to combat ‘attention fatigue’ which occurs when people, especially those with attention and focus difficulties, are forced to focus their attention and block-out stimuli, resulting in a struggle to stay focused and restrain behavioral impulses. Eventually, the effort of paying attention can become tiring. However being outdoors in a green space gives people a break from focusing their attention and helps them recover from this attention fatigue. Children with ADHD can increase their ability to pay attention and control impulses if they spend time in and around nature regularly (Kuo).

Another study, conducted in 2012, looks at the cognitive advantages of spending time immersed in nature. The results of “the current research indicate that there is a real, measurable cognitive advantage to be realized if [humans] spend time truly immersed in a natural setting.” This was a unique study because “unlike
previous research in which cognitive changes were measured with laboratory tests of attentional function and/or laboratory surrogates for exposure to nature, the current work demonstrates that higher-order cognitive skills improve with sustained exposure to a natural environment” (Atchley). These cognitive skills include selective attention, problem solving, inhibition, and multi-tasking; all of which are needed abilities for children, teens, and adults.

Section II: Causes of nature deficit disorder

Children are sponges in the sense that they absorb everything that is occurring around them, and often try to embody or imitate it. This is especially true when they observe a trusted or loved adult do or say something. Adults’ words and actions have a huge impact on children.

In the United States, each generation has its own set of generalized characteristics: the 1950’s represented the optimistic baby boomers; the 1960’s were the flower children of free love, the 1970’s demonstrated discontent with ‘the establishment.’ Skip ahead to the millennials of the 1980’s and 1990’s where impatience became a growing trait. More recently, children born after 2004 are often forced to choose between being in-sync with nature and being up-to-date on the latest technologies; it is rare to find a healthy balance between the two. This balance represents the compromise between old and new; it suggests that part of the solution to nature deficit disorder lies within technology and advancement, while the other part is found in tradition. There are several reasons why the more recent generations, who struggle to find this balance, are more commonly afflicted with nature deficit disorder. First, the media’s portrayal of violent events in the U.S. has added to parent-guardians’ fear of an unsafe environment. Second, the increase in urbanization has not only given the media more to publicize, but it also limits the green spaces available to those who live in urban areas. Third, the high level of “busyness” in the average person means that each household has less time to spend outside. Lastly, the increase in available technology serves as a barrier to getting children into nature. Each of these causes only adds to the consequences of the others; in this way, nature deficit disorder is both caused by people and perpetuated by people.

The media has a strong tendency to over-cover violent stories involving racial stereotypes, controversial gender roles, and disturbing images. Doing so not only upsets viewers emotionally but leads to a domino effect of violent acts. This is a
phenomenon that has been going on for many decades. As Dr. Leonard Berkowitz states in an article by the Accuracy in Media organization “people in the audience who are susceptible to influence get ideas from what they read, what they see, and what they hear. If their inhibitions are low [or] if they are ready to act violently, they can act on those ideas” (Irvine). In this way, the media has a large impact on the actions and reactions of the U.S. people. The parent-guardians who are exposed to these violent news stories feel uncomfortable sending their children outside. It is a natural instinct for humans to seek and desire safety, and it is also natural for humans to determine hazards, risks, and fears. A hazard is a source of potential damage, harm, or adverse health effect; a risk is the probability that someone will be hurt if exposed to a hazard; a fear is an unpleasant emotional response caused by the belief that someone or something is dangerous. One barrier to getting children exploring their natural surroundings is their fear and their parents’ fear of the possible or perceived risks. It is important to emphasize to children and their parents the difference between real and perceived risks. These risks vary depending on the location as the flora and fauna are different in each region. An example from Michigan is the perceived risk of venomous snakes. Michigan is home to one venomous snake (the Eastern Massasauga Rattle Snake) but often times, parents will impose their fear or lack of knowledge upon their child. This leads to the child developing a generalized fear based on a perceived risk. This fear will cause the child to want to explore less in order to avoid the potential hazard. This is not to say that parents and children should careless and uninformed when exploring their natural surroundings but rather parents should strive to eliminate any perceived risks. This can be done by researching the possible risk factors in the local region and only telling children about the real risks that they need to be aware of as opposed to perceived risks and fears. Risks can be minimized by simply understanding the facts. The truth of the matter is that spending time in nature is often safer than other daily activities such as driving to work.

Living in a more densely populated area can mean that crime rates and public safety concerns increase. Often times, these concerns are exacerbated by the media, which makes parent-guardians feel uncomfortable sending their children outside to play without adult supervision. Although urbanization has been going on since Europeans entered the U.S., its ties to nature deficit disorder have become more commonly recognized in the last twenty years. Cities and other urban areas, which offer limited access to natural settings and green spaces, can put the families who live there at a disadvantage. Having to commute to nature-rich areas often decreases the amount of time spent there. This in itself is an issue of socio-economic inequality. Urbanization does not just pose the issue of limited natural settings; it also raises concerns of safety.
Factors such as the media, urbanization, and busy schedules can greatly reduce the amount of free, unstructured play that a child experiences on a routine basis. Limiting a child’s time in nature has its own set of consequences, but removing the concept of unstructured and unmonitored play time can lead to additional concerns. Unstructured play time is a valuable learning opportunity for children as it can help them become more acquainted with their natural surroundings. But according to a study completed in 2005: “The largest change in children’s use of time over the last two decades has been a decline in free time and an increase in time spent at school or daycare” (Strum). While spending time at school and being under the care of a responsible adult is important for a child, being able to spend time alone is, arguably, just as important. In 2014, a team of psychologists from the University of Hildesheim, in Germany, conducted a survey of 134 people. This study found that the use of free play during childhood “was linked with high self-esteem and the flexibility to adjust one’s goals. Free play allows children to develop the flexibility needed to adapt to changing circumstances and environments—an ability that comes in very handy when life becomes unpredictable as an adult” (Jacobs). The ‘hustle and bustle’ mindset of U.S. society, however, encourages a busy lifestyle that leaves little time for this type of play. Nature is an ever-changing play area that requires the use of multiple senses and therefore is more cognitively challenging than a controlled play area. No matter how hard one tries, nature simply cannot be replicated indoors. A simple trip outside to walk through the woods for a group of elementary students can elicit many responses and provide students the platform to learn and grow in a multitude of ways. For example, students will develop their sensory responses, practice waiting, inventing, sharing, survival, and critical thinking; students will also learn about texture, color, temperature, decomposition, and new vocabulary. “Play is not a luxury but rather a crucial dynamic of healthy physical, intellectual, and social-emotional development at all age levels” (Elkind).

When children and teens lack access to a safe, nature-rich environment, and their parent-guardians are too busy to take them into nature, children and teens resort to devices such as phones, computers, and gaming consoles to keep themselves entertained. The readily available supply of technology and electronics to young children has greatly contributed to the rise in nature deficit disorder. A 2015 article published through the BBC reported that, “children aged five to sixteen spend an average of six-and-a-half hours a day in front of a screen” (Wakefield). According to the market research firm Childwise, who conducted this study, “teenaged boys spend the longest [amount of time in front of a screen], with an average of eight hours. Eight-year-old girls spend the least [amount of time in front of a screen], with three-and-a-half hours” (Wakefield). It is easy to see why technologies such as social

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media, computers, video games, and cell phones can make getting children outside much more challenging. It is not to say that using technology leads to nature deficit disorder, but if a child, teen, or adult cannot comfortably separate from the digital world, the connection to nature deficit disorder becomes more undoubtable. The balance that exists between nature and technology is difficult to find. Being tech-savvy is a valuable skill, and for this reason, children should be exposed to a wide variety of technology-related concepts. These could include website building, safe and effective use of social media, online communication tools, and graphic design. Helping children discover their technology-related interests can be beneficial. But it is important to remember that teaching children and teens to feel comfortable and curious in their natural surroundings can be equally beneficial. Having skills in technology and a passion for nature is a powerful combination for a child, one that is not seen often enough.

Today’s teens are well-aware of the global state of the environment and the climate change crisis but they lack a personal connection to their natural surroundings, something they desperately need to be able to passionately address climate change and the environmental policy. For example, you could ask a U.S. high schooler about deforestation and they could tell you all about the amazon rain forest and how the mass amounts of downed trees is contributing to our ever-expanding greenhouse gas production. They could probably even discuss with you how a capitalist system based on money over matter has led us to this point. But if you asked them about how deforestation affects their local area, they would most likely draw a blank. Climate change is felt and understood most strongly through a connection to a particular place or the identification of a specific repercussion that occurs in that particular place. Often, personal motivation to create a better future is linked with what we value most—the people and places we love” (Harris)

Section III: Challenges to the proposed ‘quick-fixes’

Nature does not have a perfect or correct form.  
Thick forests and rustic campsites 
are not the only way to access the great outdoors; it can be as simple as a trip to the local park or farmer’s market (Louv).

It is not hard to see how mass-media, urbanization, overly-busy schedules, and technology can cause children to be disconnected from nature, but just because the causes are known, doesn’t mean the perfect solution is. In recent years there have been many proposed fixes to nature deficit disorder and the children who exhibit its symptoms, but overall, they have fallen flat. While each of the major solutions

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represent important and legitimate ideas, for example, limiting the amount of
technology available to children, increasing the amount of time a family spends
outside, and adding green spaces to communities, they are not feasible because they
aim to change a variable, not a constant.

Dramatically reducing the role of technology in the lives of children is one
common solution to nature deficit disorder. And while this idea could remove a
barrier to getting children outside, there is no real way to implement it. Older
generations cannot solely blame technology for this epidemic as there are many
causes. Technology can actually be used to help fight nature deficit disorder.
Encouraging teens to use their smartphones to take pictures at local nature areas is
one way to use technology is a nature-positive way. Teens can also start a blog where
they can practice nature-inspired writing and share their nature photos. Children can
also benefit from technology. There are many apps for phones and tablets that can
help children learn about animal calls, constellations, climate change, and gardening.
All of these topics can be used to get children more interested in learning about their
natural surroundings. While it is a good idea for parent-guardians to keep track of
their child’s screen time, it is also important to show children positive ways to use
technology, instead of banning or bashing it.

Another commonly proposed solution to nature deficit disorder is to just
spend more time in nature, but this is easier said than done. While it is always a good
idea to remind children and teens to go outside, there are a lot of barriers that
prevent that from happening on a regular basis. Older generations should not only
encourage children and teens to spend time in nature but they should also spend
more time in nature themselves. By doing so, communities will become more
accustomed to heading outdoors. It can even create more opportunities for free play.
This type of unstructured time away from supervision allows children to hone their
decision making skills and become more physically and mentally independent
(Matthiessen). Additionally, spending time in outdoor settings allows for the release
of energy. Often times, children are not given the chance to release their built-up
energy in their busy lives, this can lead to poor behavior and difficulty with focusing.
While it is important to encourage children to spend time outdoors, both on their
own and with others, it is also important for parent-guardians to model that
behavior.

Adding green spaces and natural settings to urban areas has also been
suggested. This would be an effective way to target children and teens that live in
urban settings. It would not only provide near-by access to nature for the youngest
generation but it could also be used by colleges, businesses, and other organizations
on a regular basis. The main restraint with this solution is funding. Planting trees,
adding natural features, and resisting the urge to develop natural settings can be

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expensive. In order for this method to be successful there would have to be a system of reliable grants for projects that increase the publicly available green space in an urban area. Another concern with this solution is safety. Putting a park into a city does not always mean that it will be filled with families, children, and happy citizens. There are safety hazards and concerns that accompany the development of public-use natural settings in an urban area. These could be treated by having law enforcement monitor the use of the area, or by having a neighbor watch team, either of which may require additional funding and resources. While it is easy to point fingers at parent-guardians, communities, governmental systems, and even the children themselves, it is difficult to assign the blame to just one group. For this reason, I turn to public schools as the answer.

Section IV: Nature deficit disorder and public schools

Nature amplifies time, not steals it.

Many of the social, physical, and psychological changes that have led young people to be less connected to their natural environment can be addressed through public education. One of the most promising ways to bridge the growing gap between children and their natural surroundings is by incorporating environmental education and nature appreciation practices into the public education system. Schools offer a rare environment where children, parent-guardians, educational professionals, communities, and governmental systems all come together into one institution.

Nature appreciation practices encompass a wide array of teachings, readings, and routines that aim to foster a safe space for humans to interact with nature in a positive way. The goal of nature appreciation practices with young people is to provide information and resources necessary to develop routines that could last a lifetime. These could include a weekly walk in the woods or park, writing to and about nature, becoming a steward of the land, or even developing a spiritual connection or awareness in regards to nature.

The suggestions discussed below will provide teachers, schools, and communities with realistic ideas to help incorporate nature into the learning process at all levels. While making these efforts more wide spread would require a collaborative effort from schools and communities it is a practical way to fight nature deficit disorder. In order for these changes to take place in school districts of all locations, sizes, and levels of funding there would be several types of programs and practices that would occur. First, Level 1 Changes that an individual classroom could adopt on a daily basis, second, Level 2 Changes that physically take students from the
classroom into the outdoors, and third, *Level 3 Changes* that entire school districts could adopt.

*Level 1 Changes*: These include small, daily changes to common practices and activities. They are not limited to just the classroom; in fact, they can be adopted by parent-guardians, teachers, and other community members. In most cases, level 1 changes are free and relatively easy to adopt.

For everyone:

- Become a well-informed teacher, administrator, and/or parent-guardian on the topics of nature deficit disorder, climate science, and the relationship between nature and children. This can be done by reading recent literature and research. Being knowledgeable about these areas makes it easier to start and hold important conversations within a local community.
- Make meaningful connections with other teachers, administrators, and parent-guardians. Doing so will help spread information and can put ideas into action (Louv). Starting a group that meets and talks about the above mentioned topics is a powerful first step in creating a school or community wide movement.
- At conferences and other professional meetings, spend time discussing environmental education and nature appreciation practices and why schools and communities need to take action in this field. This will help to inspire others to get involved in this cause.
- Support local, state, and federal legislation that focuses on educational improvements related to environmental education and nature appreciation practices (Louv). This could include school mileages, curriculum planning, and schoolboard-planned programs. Being an informed voter and contacting your local politicians is an important step to approaching nature deficit disorder through public education.
- Send a letter to your local representative voicing your concern for environmental education, climate change, community access to natural settings, etc.

For educational professionals:

- When grouping students, use names of native wildlife species instead of numerical ordering. This can help students build a nature-related knowledge
base that can continue to grow throughout the year. (Instead of using “group #1” or “the blue group” use “the white tail deer group” or “the black walnut group.”)

- Incorporate items from nature into the classroom (animal skeletons, shells, rocks, soil samples, a vacant bee hive, an aquarium, plants, etc.) and expand the available informational texts about nature and the environment. These suggestions are possible at all grade levels and in all subject areas.

- Use Google Earth in the classroom on a regular basis to help students find the balance between nature and technology. This can be used to study land formations, geography, topography, or even environmental concerns such as urbanization and deforestation. In the English classroom, Google Earth can be used to inspire place-based writing and discussion and develop students as globally engaged citizens.

- Use place-based and object-based writing to get children and adolescents thinking about and connecting to their environment and the natural elements that reside there. This can be done by using resources such as Google Earth or natural objects, as mentioned above, or by taking students into a natural setting.

- Use textual interventions to put an environmental twist on the books already being taught. Textual intervention in a writing response activity that prompts students to interact with a text by adding or taking away elements that relate to the environment and climate. For example, the book Native Son by Richard Write tells the story of Bigger Thomas, a poor black man living in Chicago who in a regrettable instant kills a white woman and has to dispose of her body. This story gives an in-depth look at race relations in the U.S. Sadly, climate change and environmental disasters have the biggest impact on communities of color. Students could intertwine current event stories about Flint, Michigan to enhance the events of Native Son. Not only will this activity push students to research current events and statistics but it will also show students just how inter-connected humans and the environment truly are.

- “There are two pedagogical; considerations when reading in nature as an approach to reading literature. First, students can read literature to allow for an imagined movement into a natural setting. Even though students may not actually be outdoors, a piece of literature has transformative capabilities when students engage their imaginations with the author’s text. Second, students can literally read in natural settings, surrounded by trees, mountains, rocks,
stone walls, bugs, frogs and all other organic and non-organic entities to enhance a literary interpretation” (Novack).

- “In an English classroom, the reading of environmental literature offers readers an opportunity to travel great distances. Students can come to know monuments of natural history when reading the creative non-fiction of well-known authors” (Novack).

**Level 2 Changes:** These are changes that require some level of funding and planning from various community and school members. While they should be used on a regular basis, most are intended to be spread throughout a school year or semester.

For everyone:

- Visit and get involved with a local nature center that offers programs and classes for varying ages. This is a great opportunity for parent-guardians and community members to get involved in a local organization and set the framework for a stronger connection between nature centers and public schools.
- Add natural features to school playgrounds and backyards. These could include stump circles, flowers, trees, bird feeders and baths, and even milkweed plants to start bringing in a population of Monarch butterflies. Whether this is done within a small urban lawn or a large rural yard the efforts are equally important. The goal is to make nature more readily available to children and adolescents.
- Start a community garden where young people can become involved before, during, and after school. Giving children and adolescents the chance to nurture a garden can help them develop more compassion for their natural surroundings, which can lead into a lifetime of stewardship.

For educational professionals:

- Start a nature appreciation or environmental club at the middle or high school level. This will give students an opportunity to join a group of like-minded peers and teachers that are working toward a common goal. Having a chance to be a part of this type of club can get young people inspired to take action in their local communities.
- Bring live nature into the classroom. This could include growing classroom plants, having a classroom aquarium or pet, raising monarch butterflies, or starting a hatchery program for fish (Louv).
• Create poetry boxes in the classroom that students can place in a local nature area (i.e. park, nature trail, or arboretum). These are places where people of all ages can write poetry about their surroundings. The class can periodically check the progress of the poetry box.

Level 3 Changes: These are significant changes that require the permission of school officials, and a larger budget. While adopting the suggested level 3 changes can seem impossible for a single parent-guardian, teacher, or school, starting with the less complex level 1 and 2 changes can set a strong foundation for the eventual goal of reaching level 3 changes.

For everyone:

• Create a community fund that provides research grants to teacher-student pairs/groups interested in furthering their understanding of nature and the environment. These grants could be for creative writers, artists, and/or science researchers. With sufficient research and planning, it is possible to use these grants at various grade levels.

For educational professionals:

• Work with administrators to create a budget for regular field trips to nature-rich locations. These field trips should give students the chance to take samples and make observations, predict outcomes based on what they have observed, work as teammates, use lab equipment, write in different styles, learn new vocabulary, and draw conclusions. These are the types of field-based learning opportunities that are truly beneficial and influential in the lives of young students.
  o Set aside a portion of this budget to go towards an update of lab equipment. Students should have a chance to work with recent technology that relates to their natural surroundings.

Conclusion

“The most effective way to connect our children to nature is to connect ourselves to nature”

-Richard Louv

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The children and teens who sit in classrooms today will soon be taking on roles of leadership; they will be the educators, doctors, researchers, and community members of tomorrow. Now, more than ever, young people need to take steps toward environmental action and justice. While it is easy to say that, a lot of change needs to happen in order to get there. What society is looking at right now is not a disorder or a deficit but rather a generation of young people who have not been given the same opportunities or privileges. Our society weens children of nature at a young age. By 7th or 8th grade it is no longer ‘appropriate’ or ‘necessary’ to head outside for recess. On a beloved snow day (a childhood treasure in wintery places) it was common for elementary and middle schoolers to head outside to build snow forts and snowmen, go sledding, and through snowballs, then come back inside with rosy cheeks and sopping wet snow pants and refuel while you wait for your clothes to dry. But after a certain age, often 8th or 9th grade, it is dorky to go about with these childish activities. Instead, you would stay in, watching television and making a plan to meet up with friends one the roads cleared.

Teachers, administrators, and parent-guardians must be reminded of the fact that sending children to play outside is not a waste of time; in fact, children do a lot of learning and growing when they step outside the school doors. Encouraging students of all ages to spend ample time in an outdoor setting can be a helpful first step to solving nature deficit disorder, but it is also important for older generations to model a healthy relationship with nature.

The identity of the United States has been built around the natural aspects of the country itself: spacious skies, purple mountains, fruited plains, and shining seas. Nature deficit disorder is an inevitable condition for our future generations. It is, however, possible to lower the rate of its occurrence by getting children and teens involved in nature on a regular basis. School is one of the most constant variables in the life of a young person and it serves as one of the best ways to provide regular exposure to nature. Action begins with literacy and education. In order for significant change to take place, collaboration is necessary. This means that teachers and schools need to work with each other, administrators, parent-guardians and students to add nature into their daily routine, implement field-based learning opportunities, and start community-wide initiatives. Above all else, we, as individuals, need to spend more time in nature so that we can show children and teens how to love and appreciate their natural surroundings.
References


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