SURVIVING THIS: FROM MEDICAL CRISIS TO WORLD TURMOIL

Five Ways to Enhance Your Life, while Helping the Earth and Her Creatures

A Message to Readers:

Life hangs by a thread, secured to normalcy by targeted therapy chemo pills and a long history of approaching challenges in five simple, but effective, ways. Stage four (never smoker) metastatic lung cancer is not curable, but I have spent the past fifteen months running up mountains and paddle boarding in sub-freezing weather. As we face world medical crisis and turmoil, I give you the approach that escorted me through childhood adrenal cancer, years of PTSD, the loss of my young father, my own patients' traumas, and my daughter's cancer. Kept on this earth for seven decades for a reason, my mission is to share what has worked. I have lived this approach, as have my own patients and loved ones, and I know that it makes a difference. I hope your journey is made easier as you employ these proven approaches.

A few months ago, when I began writing this course, the world was very different. Surely we all had our worries, and some of us were more challenged than others. But, compared to most of the world, we had access to the best of life. Even in the most daunting of circumstances, we were still blessed. As my husband, Ben, and I made the monthly trip to Mass General, first passing pockets of rural poverty and later the tenements of Boston, my heart cried out for those denied access to the kind of care I was receiving. Many could not even contemplate getting medical assistance due to the inability to deal with even basics like child care, transportation, and housing near hospitals. Others likely ignored symptoms due to fear of job loss or what the future might hold. We are doing what we can to help out in a variety of ways. Our efforts may be miniscule compared to the world's problems. However, I feel confident that the effort of each individual who becomes part of the larger team can have impact—regardless of whether the obstacle is Covid-19, environmental change, medical research, or whatever draws your passion. Together, we can move mountains.

This self-directed course draws from my philanthropic project, "Bonding with Nature: Responding to Life's Challenges and the Aging Process" (Seapoint Books, 2017), as well as my current writing and lectures. I hope that it will be helpful to all who face Covid-19 and the many encountering other obstacles for whom this course was originally intended. I hope the sharing of personal information presents promise for you. (Highlighted in green are succinct takeaways.) You are welcome to share the document. Pass the love forward. Dianna Emory, Ed.D.



ALL ARE FRAGILE. CARE FOR YOURSELF AND THE NATURAL WORLD

Brief Bio of the Author

Founding President of the Behavioral Medicine Center and Training Institute, Dr. Dianna Emory is a retired clinical mental health counselor and national educator of mental health professionals, physicians, and graduate students; a builder of teams that advance personal and environmental wellness; and a volunteer and athlete with deep knowledge of land trusts, green spaces, and national parks.

Dianna is the author of *Bonding with Nature: Responding to Life's Challenges and the Aging Process*, a philanthropic project benefitting medical institutions and organizations working on behalf of the natural world and her creatures (Seapoint Books 2018). She is currently completing *Assess, Adjust, Advance: Facing Adversity and Finding Your Silver Lining*, and a third book, *Moving Past Cancer*. She has written for a number of journals and magazines and published a series of relaxation therapy tapes soon available as downloads. She has served in volunteer leadership roles for numerous organizations including the American Mental Health Counselors Association, Maine Clinical Counselors Association, Northern New England Society of Clinical Hypnosis, College of the Atlantic, Maine Coast Heritage Trust, Friends of Acadia, and Schoodic Institute.

SURVIVING THIS: FROM MEDICAL CRISIS TO WORLD TURMOIL Five Ways to Enhance Your Life, while Helping the Earth and Her Creatures

A Self-Directed Course for Facing Life Challenges

Dianna K. Emory, Ed.D. <u>dkemory@gmail.com</u> 207-288-9581 DiannaEmory.com PO Box 125 Salisbury Cove, ME 04672

Table of Contents

- 4 Assess, Adjust, Advance
- 4 The Five V Approach to Facing Adversity
- 5 Five Easy Steps
- 8 Venturing Forth to Engage Deeply with the Natural World: from Your Own Environment to the Larger Community
- 16 Visualization: Capturing Your Memories, Creativity, and Experiences
 - 20 Script: General Relaxation with Suggestions for Good Health
 - 25 Delving into the Detail
- 31 Vetting: Choosing Healthy Approaches that Work
 - 31 Tackling Two Universal Problems
 - 31 Relieving Stress
 - 32 Perceived Stress Scale
 - 34 Overcoming Sleep Difficulties
 - 39 Nutrition: You Are What You Eat
 - 39 Mood Foods
 - 42 Exercise: The Best of It in the Green Outdoors
 - 43 Stretches for Health and Fitness
 - 44 A Sampling of Stretching Exercises
 - 45 Calories Burned Per Hour During Several Activities
 - 46 The Laughter and Happiness Prescription
 - 47 The Satisfaction with Life Scale
 - 49 Building Relationships/Maintaining a Support System
 - 52 Keeping Your Spirituality Turned On
 - 54 Accepting Miracles
 - 57 Journaling
 - 59 Tapping Your Creativity
 - 60 Building a Garland of Hope
- 62 Viewing Others' Circumstances
 - 62 A Case Study
- 64 Volunteering Improves Your Quality of Life
- 67 A Sampling of Ways that You Can Help the Natural World and Her Creatures
- 69 A Sampling of Organizations Working on Behalf of the Natural World and Her Creatures
- 73 Definitions
- 74 Photo Credits
- 75 References

ASSESS, ADJUST, ADVANCE

ASSESS YOUR CURRENT SITUATION.

- Q: What are your current challenges?
- Q: How would you rate your level of optimism (5 extremely optimistic; 1 very pessimistic)
- Q: What image do you have of yourself in your desired emotional and physical condition?

ADJUST YOUR EXPECTATIONS.

- Q: What limitations are there over which you feel no control?
- Q: What are some things that you can change?
- Q: Where do you need assistance?
- Q: How do you see yourself a year from now, given the best circumstances?

ADVANCE IN A POSITIVE DIRECTION. USE:

THE FIVE V APPROACH TO FACING ADVERSITY Venturing Forth, Visualizing, Vetting, Viewing, and Volunteering

On a daily basis, and particularly when we are facing life challenges, we can build inner strength, physical and emotional resilience, and greater comfort through **Venturing Forth**, **Visualizing**, **Vetting**, **Viewing**, **and Volunteering**.

Q: What ever-present resource can relax and energize us, restore positive feelings, feed and strengthen our bodies, provide companionship, and help us move more comfortably through challenging times?

Our natural world is available at no cost whenever we want to access it—whether in our home environment, around our communities, or in one of a plethora of protected spaces, from local land trusts to national parks. When immersion in nature and a connection to living things are teamed up with a healthy diet, visualization techniques, regular exercise, volunteerism, and other strategies, the result is a winning combination that will see us through the most challenging times of our lives and carry us through old age.

As a childhood cancer survivor with a bad case of post-traumatic stress disorder, my good fortune came in a life-saving connection to two environmental stewards. My grandmother, an early advocate for the intersection of art and nature, and my uncle, a research biologist, devoted themselves to my recovery. The threat of early death tormented me. Engagements with nature got me through the difficult periods, healed my body and my spirit, and saw me on to the time when I could keep up with everyone else. I hope my successful approaches work for you, too.

Emotional and physical pains were soothed through expeditions into the woods, fields, and along the shorelines where the healing waters of Sebago Lake and the Atlantic Ocean transported me to a happier place. My favorite contacts were the bugs and the birds, the amphibians and the fish, and the many mammals that befriended me. My grandmother helped me create replicas of these beloved creatures through the paints and clay that were her tools. She, my parents, and my uncles took me out into nature at every turn and passed on their own knowledge and love of green spaces. When I was really struggling, I found that I could employ my commitment to the environment in creative ways until the next time that I could immerse myself in its lands and waters. These experiences were coupled with early spiritual messages and a strong survival instinct.

Q: What early life experiences inspired your commitment to the natural world?

Q: Who was instrumental in your enthusiasm for green space activities?

A large body of research 14, 54,76, 77, 85, 86, 87, 88 confirms the fact that we *need* exposure to nature. It fills our senses as we breathe deeply of the scents of springtime, watch the soaring of a bird across the sky, are mesmerized by the bubbling of a spring, or are awe-struck by the crash of surf upon a craggy shore. Access is particulary important during challenging times. When we are unable to engage with the green world, we know that something very important is missing. We may feel stressed, anxious, depressed, and deprived of an element that is crucial to our health. Medical professionals and scientists tell of the vital connection between fitness and wellness, the merits of outdoor exercise over indoor activities, and the negative impact of being "plugged in," indoors, and away from nature. From our own experiences, scientists or not, we know they are correct.

The challenge comes in how to continue to connect with our soul and body-nurturing environment, and provide ourselves with an overarching healthy lifestyle—now and when we are overwhelmed by work and responsibilities, halted by medical challenges, slowed down by the effects of aging, or facing world turmoil. One answer can be found in learning to derive daily inspiration and stimulation in new ways, preserving our active experiences in nature to use later when life is more constrained. Each of us has a host of memories of experiences in the natural world, as well as the ability to tap our inner resources and tune in to all aspects of our innermost selves in order to achieve our wellness goals.

Q: How can we preserve our experiences outdoors to carry us through periods when we have no extra time, are slowed down due to illness or an accident, are very elderly, or are challenged in other ways?

FIVE EASY STEPS

VENTURING FORTH to engage deeply with the natural world gives us access to physical and mental renewal that can last a lifetime. All green spaces offer us that opportunity. While we are able, we can actively seek deep physical, spiritual, and emotional immersion in our environment. As a model for all natural environments and green spaces, more detail is found in *Bonding with Nature: Responding to Life's Challenges and the Aging Process.* It builds direct connections to

natural treasures, including Maine's Acadia National Park, St. John's Virgin Islands National Park, other protected areas, and the creatures that inhabit them. You can use this same approach in your own interaction with the earth and her creatures, wherever you live and travel. If you are not able to actively access these places, there is much that you can do to fill the void.

Q: What green space is within your reach?

When active engagement with nature and living things is limited, there are many possibilities that will continue to fill us with the joy of our green environment and all living things. As we engage with the world and her creatures, we can etch their details into our memories so that they can be retrieved at a later date to help us out. We will explore some of those options as well.

Q: When you are unable to directly access green space, what do you do to bring it into your life in some other way?

VISUALIZING enables us to bring green space experiences into our minds whenever we desire through tapping our memories and imaginations. You can easily learn relaxation techniques and visualization approaches. Relaxation therapy scripts, audio recordings, green space visualizations, and the use of deepening methods are helpful. Texts and recordings based upon your own experiences can help transport you through difficult periods—offering restoration, insight, relief, and hope for the future.

Q: How would you like to enrich your experience with meditation, relaxation techniques, visualization, and similar approaches?

VETTING means investigating various techniques to see which ones can help us the most. An investment in healthy habits will produce a solid return. Provided in this document are charts and other information related to exercise; healthy dietary choices; building support networks; choosing alternative or enrichment activities that complement the actual outdoor experience; and employing relaxation and visual imagery techniques. These are for use now and during the times when we are slowed down by responsibilities, medical issues, or the aging process. These techniques will help to keep us strong, optimistic, and able to face life's challenges in a resilient manner. We can take all of these approaches and combine them with our interests in the natural world and her creatures, thus maximizing the benefits from our experiences.

Q: What self-care strategies would you like to enhance or add to your own life?

VIEWING other people's successes during difficult periods in their lives helps us to understand how we can cope with our own challenges, and sharing our experiences with others encourages them to do the same. We begin by building and nurturing relationships, developing mutual trust, and strengthening our bonds with one another.

Q: What does your friendship and support network look like?

VOLUNTEERING and making a commitment to assist an important cause take us outside ourselves to employ our passions and our expertise, as we act in the interest of others and the

environment. If we do even one small thing each day to help another living thing or the world, we can feel that we are having some positive impact—even when our own situations might seem overwhelming.

Q: What volunteer activities are you involved with, or where would you like to invest some time?

We can apply the Venturing Forth, Visualizing, Vetting, Viewing, and Volunteering framework to any green space that is available. As examples of how you can maximize your engagement with the natural world, we are going to first **venture forth** to delve deeply into our home environments and natural areas. We will examine the land, the skies, and the waters of those places, as well as some of the creatures and other living things that are found there. We can rejoice in all that is provided for our exploration, examination, and enjoyment, and we can employ the natural world to assist us through all stages of life. As stewards of the world, we can offer back the best that we can give to help protect these exquisite lands, waters, and living things. We will have invested our time well.



VENTURING FORTH TO ENGAGE DEEPLY WITH THE NATURAL WORLD: from Your Own Environment to the Larger Community

THE LAND

"Wilderness is not luxury but a necessity of the human spirit." Edward Abbey

THE SKY

"For my part, I know nothing with any certainty, but the sight of the stars makes me dream." Vincent Van Gogh

THE WATERS, FRESH AND SALT

"The sea is everything. It covers seven-tenths of the globe. Its breath is pure and healthy. It is an immense desert, where man is never lonely, for he feels life stirring on all sides." Jules Verne

The previous peaceful photograph offers a colorful glimpse of land, sky, and water for your exploration. Study it closely and try to capture a mental image of specific details. Focus deeply on the aspects of the photo that are most appealing to you. Think about the creatures that might live in that environment, and recall times that you encountered some of your favorites in the past. As you study the photo even more closely, you might be reminded of a special place from your memory or your imagination. Let yourself think about that place for awhile, and how cherished landscapes and sky can put us in a relaxed and comfortable mode.

Through a host of conservation efforts, millions of acres of precious land have been preserved for our active use and quiet contemplation. In our communities and our own backyards, we are drawn to even the smallest microcosms of green space. The blue spaces of the waters and the sky beckon to us as well, and those places are included whenever we refer to "green space." We are able to access these spots for vigorous exercise, moderate recreational activities, the viewing of magnificent vistas, travels with loved ones, interactions with wildlife and plants, and spiritual renewal. We can also learn to use the enormous potential of our own bodies and minds in a way that will carry us through times when we cannot engage directly with the natural environment.

Forming a relationship with the natural world can begin wherever you find yourself right now. Scan your interior environment and zero in on the first green thing you see. For me, it is the orchid sitting on my desk. Its blooms are past, but its leaves are fresh and tiny buds promise rebirth. Two roots stick out from the pot, little poking caterpillar nubs searching for something beyond their home, seeming to beckon to me to come closer. Hmm. There seem to be long, white cat hairs on the orchid's leaves, indicating that something went on here between fauna and flora last night.

Q: What particular bit of green life are you seeing inside your home, and what notes can you make about its appearance? Start with what you see directly, observing what detail you can. If you have a magnifying glass or a botanist's loupe (available from Bausch and Lomb), take a really close look. Record all that you can see.

Q: How are you feeling as you look at your plant? Do you feel a connection to it? (If you do not have a plant somewhere in your house, please invest in one or ask a friend for a division.)

Q: Are you hearing any sounds of life as you study your plant? Eliminate whatever man-made noise you can and really listen for a few minutes. What natural sounds can you hear, regardless of the human-made ones that may be ever-present? Try zeroing in on them in the same way you did the visual details.

Q: Does your nose detect any fragrances? Inhale deeply, close your eyes for a minute, and take a deep sniff. What do your olfactory senses find?

Q: How about a living creature within your home?

If you have a pet, go deep into the details of the creature you see, and touch that animal, too. If you have no pet, look around for some other living creature. I know where a ghost spider is living in my laundry room, as well as a ladybug that I saw on a plant this morning. Either one provides an opportunity for study, but probably does not invite touch. We have this fat white kitty who is now snoring as loudly as the pouring rain and begins to purr constantly, as I stroke her silky fur. That would be the same white fur that typically coats every pair of black pants I own. Her details are numerous—soft paws that pat us when it is dinner time, a pale pink nose, and long-lashed cat eyes that I will remember forever. Lots of details.

Q: Is there a way you would like to enrich your interior space through bringing in more plants or animals?

If cat snoring and dog walking are not for you, one orchid and a couple of fish are a start!

Now choose a favorite window from which you can see something of life outdoors, a place that is ripe for examination and the stimulation of a host of memories. Even if you are looking out at a city street, search for a bit of green or a living thing. As you focus on life outside your window, go deep into the sights, the sounds, and the memories.

Q: Where did your thoughts take you?

Q: What is outside your door, and how do you embrace it?

Rain or shine, we head out the door to delve into the area right around the house. Today, the chickadees' songs call to me, the sweet sound of a thrush beckons, and the drumming of a pileated woodpecker announces his presence.

Maybe you would like to go out the door right now to listen carefully for nature's sounds, breathe in her scents, and examine the details of her flora and fauna. Wherever you are, even if it is on a busy city sidewalk, there is likely still a bit of the natural world awaiting your examination. As you take a stroll there, make some more notes of what you find and once again go deep into the detail. Just be careful of where you are going. I did this once and fell off the steps into the rose bushes.

In your imagination, how about joining me here in Maine, where the conifers etch their dark, feathered branches against the sky? From my window, we see three white pines, two spruces, and several small oaks and maples that are beginning to unfurl. The crows are up there in the pines, calling out, probably preparing to check on the status of the phoebes' nests or take more than their share from under the bird feeders around the corner. Their sleek feathers and curious eyes are so familiar, reminding me of a crow from forty years ago who rode daily upon the rump of my daughter's gray pony. Last spring's memorable crow event occurred when they took out apparent anger at a day's lack of seeds. Returning home, we discovered at least twenty tulip heads nipped off cleanly and thrown about. The next morning, we watched the crows confirm their guilt. They were scolded, and we complied with their daily seed allotment.

Refocusing on plants, the field below the crows' pines holds patches of trailing arbutus (Epigaea repens), mayflowers, in full bloom. Although their tiny pink blossoms and leathery leaves await my trip out the door, I can conjure up their fragrance as my fingers type these words, filling my head with more joy than memories of nipped tulips. Can you recall the fragrance of mayflowers or another blossom? Perhaps the thought of lilacs or a sprig of lavender will quickly bring you a memorable scent. Close your eyes, and inhale again.

Q: How did you find yourself responding to that passage?

Q: What community greenspaces near you are ripe for exploration? If you don't know, check out the website for your town or local land trust to find the closest place where you can get away from the din. You might want to go soon to one of those places, walking if possible.

Join me now on a walk to a vernal pool on the edge of a blueberry barren, where I will spend about 15 minutes observing bugs and, hopefully, something else. Up a wooded road we go, into the barrens that stretch as far as we can see. Along the edge, we find the pool and stand silently by, waiting to see what happens. The vegetation is thick and ripe with muck and algae. As a wood frog dives into the pool, we are astounded to see a thin snake moving from the wet leaves down into the depths of the pool. This is a Northern red-bellied snake, one of several local snakes that can survive on land or in water. At the back of this small pool, we see a mass of wood frog eggs that can easily be differentiated from salamander eggs. Frogs lay individual clear eggs in masses with the outline of each egg seen within the mass, while salamanders coat their entire egg mass with an additional layer of gel and often attach their egg masses to sticks. Common toads lay their eggs in strings. We do not see toad eggs here, but let's go look them up online later. Did you know that sometimes egg masses can look cloudy due to the genetic makeup of the female, not some ailment? Don't you want to just climb right into that pool with all of these creatures to see what else we can find?

While I sit here in the mud in the vernal pool for a while longer, you might want to immerse yourself in your own community green space and seek the intricacies of life there. If you are unable to get outside, tap your memory for a time when you did venture into a nearby green space, and recall what you found there.

Q: What local land trust or conservation group is near your community?

Mount Desert Island in Maine, where we make our home, has the great benefit of Maine Coast Heritage Trust, the state-wide land trust, also serving as the local land trust through its MDI Committee. For years, I was honored to serve on the MCHT board and chair its local land trust component. When we reach the chapter on volunteerism, please take a hard look at MCHT, as well as other land trusts.

As you can see, we are building our connection to the natural world, branching out from the interior space of our own home to our backyard, to community resources, to state parks and other protected areas, and then on to our national treasures. As we age, encounter medical issues, or are constrained in other ways, we can reverse this order. Through recalling details of green spaces, remembering our activities there, and learning to draw from our memories and our imaginations to build strong sensory images, we find ourselves able to tap all of what we have experienced—even when limited to our interior space. We follow this route, sometimes shoring ourselves up for the future, while at other times taking a deep breath before plowing through a challenge. We are facing life head-on and doing all that we can to maximize our benefits from life's peak experiences in order to weather the valleys in a more comfortable manner.

Now, we are going to try the "Where are you today?" approach again, as it gives another opportunity to sink deeply into the world around you, absorbing it for its current value and restorative potential.

Q: What piece of green environment is within your reach, so that you can enjoy it and then easily tap its imagery when you want?

Q: How do you want to engage with that place today?

In the city, the joy of a Central Park run, replete with pockets of dog parties, gives a positive start to the day. Olmsted knew what he was doing when he strove to create "pleasure gardens" for escape from city pressures. Later, the community or urban park movement was driven by recreational opportunities, particularly pools, playgrounds, and ball fields close to clusters of housing. Many of the early community parks were let go during the mid-1900's, but have since been resurrected. Interesting data from Resources for the Future³⁷ states that at last survey, in 2009, 85% of urban park directors surveyed indicated an increase in hiking or walking, 90% of park directors surveyed indicated an increase in popularity of dog parks, and 80% of those surveyed indicated an increase in skate park popularity.

Q: Is there a community or city park near you, and how do you use it?

As we move from community parks to look at state parks, according to the National Association of State Park Directors, as of 2014 the United States had 10,234 state park units, with 739 million annual visits. "The big boost to state park systems came with the establishment of the Civilian Conservation Corps in 1933. This work relief program put young men between the ages of 17 and 23 to work planting trees, cutting trails and scenic vistas, and constructing picnic areas, campgrounds, cabins, bathhouses, and other facilities...state parks originally focused on

preservation rather than recreation. But, beginning in the 1960's, increased demand for recreation fueled development of state park facilities."38

Q: Is there a state park that you would like to explore?

If you are searching for a state replete with terrific state parks, Florida can show you some excellent sites. Despite rampant development throughout much of the state, the Florida State Park system affords water access, lovely hiking and biking, and opportunities for extraordinary wildlife viewing.

Q: Have you accessed one of our national parks?

Q: Is there a new one you would like to explore? (Remember, exploring can happen in other ways than actually going there.)

By 2015, there were 25,800 government protected areas in the United States covering 499,800 square miles, as well as 787 National Marine Protected areas stretching over an additional 490,893 square miles.

As Theresa Pierno, President and CEO of the National Parks Conservation Association states, "From the shores of Acadia to the peaks of the Rocky Mountains and hallowed ground at Gettysberg, our national parks are dynamic places that people from around the world can visit to have once-in-a lifetime experiences."³⁹ Regarding our national parks, former Secretary of the Interior Ryan Zinke stated that 2016 visitation was up 7.7% over the previous record-breaking 2015 rate. The National Park 2016 centennial year saw nearly 331 million visitors to the system.⁴⁰ As of 2016, more than 13 billion visits had been made to our national parks since data collection by the National Park Service began in 1904. ⁴¹

Not everyone can travel to a national park. Most of us, however, can get outside into some green area where we feel that we have contact with the natural world and her creatures. At the very least, we have our memories and the ability to delight our senses through creative visualization. And, through books, the internet, and other media we can absorb information and photos of extraordinary green spaces replete with the creatures that live there.

Q: What are some of the most available places for your exploration?

The deeper your engagement with those natural places and their creatures, the more memories you will create, the more paths you can travel in your mind's eye, and the more promise you will find in making this connection last a lifetime.

As models for engagement with the natural world, as mentioned earlier, in *Bonding with Nature* I included some detailed information about two national parks that exist primarily on islands in the sea that binds us all together. Through examining much of what Acadia National Park and Virgin Islands National Park hold, we can create templates for thinking about any part of the natural world from our current experience, our memories, or our imaginations. We can tap into these green places and the nearby waters as vehicles to life enrichment. We can use what we find

there to positively propel those we love and ourselves through all stages of life and its inevitable challenges. And, we can enrich ourselves with scores of memories and visual images from which we can draw during the times when our ability to get outdoors is limited. We can build details in our minds of all that is around, learn and observe all that we can of creatures and places, indulge all of our senses, and carry the memories, real or imagined, on throughout life. I have lived this approach, and I can guarantee that it works. Just gather up the details, create the memories, embed them in your mind, and access them whenever you choose. Following is an example of how I connect with the lands and the waters near Acadia National Park:

For me, signs of spring are around as the days grow longer, robins hop along listening for worms, and the eagles with last year's young fly low across the fields. The narcissi are up one inch, a few patches of snow hang on stubbornly, while the rhododendron branches brought indoors in February are in full bloom. This morning, I choose not to stay on land. Rather, it is the bay that draws me to it on this April day that finally feels like springtime.

From the bay, Acadia's mountains line the horizon presenting tempting thoughts of adventures there following this expedition on the water. Acadia holds a multitude of promises. Out on Frenchman Bay, the guillemots have replaced the longtails. We are missing one loon—gone, we fear, to the eagles. Ben saw a big white-headed adult carrying something black and white across the cove last week. They can pick up a small cat, we witnessed years ago, so they can surely carry one of last year's loon babies. Once an endangered species, the bald eagle has recovered in many places, including on Mount Desert Island and in Acadia National Park.

The sun casts a long sparkling path from the east, and the breeze encourages me to head for Leland Point and the site of the eagles' nest. Do all three live in that nest? And what happens when this year's young are born? Are the adolescents kicked out to make room for their younger siblings? All of those questions can be answered by a few hits on the keyboard, something I find almost as miraculous as spring's rebirth. I am a product of days when all research took place in library stacks and through interlibrary loan. How far we have come technologically, and what intellectually stimulating opportunities there are for us online! For now, we want to be outdoors as much as possible, but that world of technological wonders holds promise for those times when old age or illness shut our door. Right now, a paddle board on Frenchman Bay waits for me.

With the wind on the nose, the chop across the bay has built, but the resistance of it feels good. My view trains on the eagles' nest and how it rests in the crook of the tallest white pine on the point. Why do I never see the eagles making repairs? I know these nests are built to last a lifetime, but there must be some occasional damage from the howling northwest winds—one more thing to learn about at a later time.

Turning and putting the wind at my back, the panorama of sky and water and evergreen shore reveal how available those things are to most of us, regardless of where we find ourselves, thanks to advocates for conservation.

Memories of this sort of experience are what I turn to when I most need a boost and cannot be active.

Q: What is a memory to which you might turn?

Through examining much of what our national parks hold, we can develop templates for thinking about any part of the natural world from our current experience, our memories, or our imaginations. We can tap into these green places and the nearby waters as vehicles to life enrichment. We can use what we find there to positively propel those we love and ourselves through all stages of life and its inevitable challenges. And, we can enrich ourselves with scores of memories and visual images from which we can draw during the times when our ability to get outdoors is limited. I have lived this approach, and I can guarantee that it works.

Q: When you actively engage in the natural world, what creatures, plants, and geological features might you expect to see?

Q: How can these experiences serve as a model for green space engagement, regardless of where you live or travel and regardless of your stage of life?

Q: How can you carry with you the memories and the creative imagination to translate these experiences into a treasure trove of visualizations that can last throughout your life?

Q: How can you volunteer to assist in ensuring that these places and creatures are healthy and are available in perpetuity?

Q: In concert with all of this, how can you care for yourself through healthy exercise, dietary, and support network choices?

Q: How can you choose alternative activities that will link you to the natural world during challenging periods?

I share with you now a time when a national park helped me through one of life's valleys.

"The Critical Nature of Green Space" Reprinted from *Friends of Acadia Journal*, 2004, Board Chairman's Letter

"One year ago, perched on a favorite rocky outcropping, I contemplated the sweeping view and considered how to cope with life's latest challenge. My 34-year-old daughter, Melissa, was in the sixth month of treatment for a very aggressive form of breast cancer. Surgery was behind; another year of chemo, radiation, and an experimental treatment lay ahead. Melissa's active, happy life had been ambushed, and there seemed to be no promises for the future. My worst nightmare as a parent had become reality.

The love, support, and prayers that so many of you have offered have been enormously helpful. Thank you. Melissa has successfully completed her first year of treatment and is happily and healthily plunging forward, continuing to give to others while also nurturing herself.

Throughout this ordeal, I have frequently turned to Acadia for support. During the worst of it, the park has welcomed and nurtured me, providing endless opportunities for quiet reflection. Without the runs around the lake, climbs up the West Face, bike rides, and many hours of hiking and cross-country skiing, I would have been missing

the glue that has held me together. Many of you have joined me on these expeditions, and that has made each one more meaningful.

Most of us have at some point faced a crisis that has demanded that we gather up our resources in order to forge ahead. Green space allows us the opportunity for venting and caring for our bodies through physical activity, time away from the crowds, unobstructed views, and access to beautiful places. With others or alone, we can renew and energize ourselves in a way that is often impossible in the confines of a building or structural intrusion. Time away from the reminders of life's pressures—as well as from the visual and auditory pollution that seems to be ever-present in our society—is critical to our emotional and physical health. During times of stress, these escapes are even more important.

Acadia National Park blesses us with the opportunity for spiritual, physical, and emotional renewal. This column is dedicated to all of you who have found solace in its resources during difficult times and to those who have faced debilitating mental or physical illness. Sometimes, even the memories of our times in the park help us to move forward more comfortably. With love and thanks to you all for helping to protect this extraordinary place." *Dianna*

Q: Can you think of a time when the natural world helped you out?

Venturing Forth: Connect with the natural world and her creatures as much as possible. Immerse in the details of some aspect of nature right now. Draw upon your memories, your imagination, and other resources to keep nature in your life always.

VISUALIZATION: CAPTURING YOUR MEMORIES, CREATIVITY, AND EXPERIENCES

"Look deep into nature and you will understand everything better."

Albert Einstein

"My recollection of a hundred lovely lakes has given me blessed relief from care and worry and the troubled thinking of the modern day. It has been a return to the primitive and the peaceful." Hamlin Garland

Unusual childhood experiences, from traumatic illness and surgery to the loss of a parent as a teen, led me to explore a host of ways to cope, as I describe in *Bonding with Nature*. Alternative approaches to healing came naturally to me and were integrated into my life in many ways, as I sought to escape the fear of death and dissociate during medical exams. Then, I did not know that the retreats into visualizations that were a part of daily existance would become such an important component of my personal and professional life.

A desire to assist patients with chronic pain, surgical issues, major medical crises, anxiety, and depression was the inspiration to pursue formal training in these techniques through the American Society of Clinical Hypnosis and its affiliates while simultaneously working on my master's degree and then my doctorate. In the meantime, I used meditation twice a day for twenty minutes to help ward off fatigue related to a very busy lifestyle. Then, now over forty years ago, I began using relaxation techniques and creative visualization in my clinical counseling practice. How rewarding it was to see others, including two dear friends whom I accompanied into the operating room, benefitting from the same approaches that had helped me throughout life.

Numerous studies have documented the effectiveness of meditative techniques on physical, mental, and spiritual well being. Evidence supports the positive impact of these approaches on stress reduction, pain management, focus of attention, and minor anxiety and depression, among others.

A humorous incident occurred recently when I had surgery for an ingrown toenail. The physician, who refused to let me use visualization rather than a numbing agent, informed me that the numbing agent would "hurt like hell for a few minutes and feel like a thousand bees are stinging you"—probably not the best bedside message. As he prepared the syringe, I focused on a metal object, telling myself that my foot and toe were numb, as if sitting in ice cubes. "Why aren't you even flinching?" asked the doctor as he injected my foot several times. "Are you using that visual imagery you told me about? And, how can you do that when four people are talking around you?"

"Because I am focusing in on something (it happened to be the nurse's earing), I feel no discomfort," I said smugly. A short while later, the surgery completed, I walked out the door pain free with a speedy recovery—typical for me after a series of more complicated surgeries where I employed relaxation techniques.

I am not suggesting that you launch into your next surgery with no anesthesia. Rather, this illustrates the power of one's own mind to affect mental and physical well being.

(If you have reservations about using relaxation techniques, have a seizure disorder, or have a major psychiatric condition, please consult your physician and follow his or her advice before using these approaches or making any changes to your typical routine.)

Q: What is your experience with visualization, guided imagery, or relaxation techniques?

We are going to begin by keeping it simple. You can do these exercises on your own or with someone else. You can record them or have someone read them to you, if you want.

Start by taking five deep breaths and having a big yawn and stretch, even if it feels contrived. Actually, it probably feels pretty good, doesn't it?

Now, close your eyes, breathing freely and deeply. Picture yourself in some relaxing place from your memory or your imagination. Fill your senses with that place—see the shapes, hear the sounds, see the colors, enjoy the tastes, smell the fragrances—put as much detail into the experience as you want, and just stay there for a few minutes. Then, open your eyes and think about how you are feeling.

You just accomplished a visualization exercise. See how easy that is? Let's try it again. Was it even easier that time? You can practice visualizations any time you have a few minutes and want to relax.

Imagine a peaceful, lovely place from your memory or imagination, incorporating all of the colors, scents, textures, and images you can. Go deep into each aspect of that place.

Q: How did you respond that time?

The phrase "in your mind's eye"⁹³ is a great way to generate the visual image that you get when picturing something in your mind. This happens all the time, with no effort. Images come easily and effortlessly when we focus on different thoughts. Some people are more visual than others, but we can all do this. You can refresh yourself easily and effortlessly, whenever you want—even if you have just a few minutes or are trying to quickly bring down your anxiety level.

Let your eyes drop closed again, take five deep breaths and let yourself drift down, down to a more and more relaxed state. In your mind's eye get a picture of a pet or one of nature's other creatures you care about. Think about the details—the shapes, the sounds, the colors, the textures, the scents, and all the other sensory messages you get. Focus on the feelings you have when you are with that creature. You might want to think of a time you really enjoyed doing something with him or her. Just rest there for a few minutes and then open your eyes, feeling very, very good throughout.

Q: How did these brief relaxation exercises work for you?

Now, let's try a progressive body relaxation. (If you want, you can record the following text, or have someone read it to you.) Please find a comfortable place to recline where you will not be disturbed by telephones, pets, or other interruptions. Stretch out, without crossing your arms or legs, let your eyes drop closed, and begin breathing freely and deeply.

Focus on relaxation flowing in, tension flowing out, as you breathe freely and deeply and let everything go. Just put everything on hold and let yourself relax completely, breathing freely and deeply, freely and easily. As you relax more and more, imagine a warm, comfortable wave of relaxation flowing over your body. Start at the top of your head and move through each body part, focusing and letting each part go loose, limp and relaxed as the warm, comfortable wave of relaxation flows over you. Rest in that comfortable condition as long as you want, knowing that your body is restoring itself physically, spiritually, and emotionally. Then open your eyes feeling completely refreshed, yet relaxed, with renewed energy.

(If you choose, use this technique to help you drift off into a deep, sound night's sleep rather than returning to alertness.)

Q: What was your response to this brief progressive relaxation exercise?

You might want to try meditating, which is another form of deep relaxation. Choose a word or phrase upon which to focus. Sit upright, close your eyes, and focus your mind on your word or phrase. Breathe freely and deeply, relax your body and repeat your word or phrase as you exhale. If your mind drifts away, nudge it gently back again. Continue for 15-20 minutes.

Q: What do you think of that?

You might have already tried yoga's combination of stretching exercises, controlled breathing, and meditation—another very effective way of bringing on the relaxation response.

For another slant on things, get your pen and make a list of relaxing experiences. These might include hiking to a beautiful spot where you can put life in perspective, lying on the beach inhaling the scent of the ocean, cuddling your pet in your favorite chair, breathing in the scent of lavender, taking a warm bath, or sitting in a garden observing all that is around you. Give yourself the opportunity to re-visit some of these experiences and identify which bring you the greatest sense of calmness.

Q: How do you feel right now?

Now, we are ready for a very important tool. Reaching within our remarkable minds to engage our memories and our imaginations through creative visualization enables us to move to a comfortable space where we can refresh ourselves within minutes. We are rested and energized, our minds are clearer, and we move forward feeling much more positive. As caregivers for others, or in our professional duties, we are better prepared, and we find things less overwhelming. As patients affected by accidents or illness, we move into surgery or the treatment process more easily and derive greater benefit. And, as aging adults, we easily access the experiences we hold dear while creating new adventures for the future. In each of these

situations, the natural world and her creatures contribute heavily to the path to greater life satisfaction, as we engage with them in whatever way we can, while also building a repertoire of details from which we can draw when we want to create meaningful visualizations.

During periods when we are overwhelmed with work or responsibilities, ill, injured, or just plain old, we may be unable to utilize all of the resources that normally help to keep us at peak wellness. That is the time when it is particularly important to engage in the relaxation response and creative visualizations from our memory or our imagination. They can help us to feel so much better.

The visualization below may be used to enhance physical and emotional well being and as a step beyond actual outdoor activity. Visualizations that can be integrated into relaxation approaches are sprinkled throughout this document and my book. These resources and the ones that you create can be used now and in the future when work, medical issues, family responsibilities, or old age interfere with your ability to get out and actively use your beloved green spaces.

Using these techniques can make a significant difference in each day and will add up to a life where everything comes a bit easier because stress has less opportunity to disrupt you. There has been an aura around visualization and relaxation approaches that has led people to think that they need someone else to "do it" to them. The fact is that these techniques are simple to learn and just require regular use for them to become very, very effective. Everything you do can be impacted—from managing your children in a calmer manner, to bringing down your level of irritation with a co-worker, to lessening the amount of anesthesia you need during surgery, to making a speedier recovery, to running faster, to bringing back the memories of expeditions into the green outdoors. And, all relaxation approaches assist you in gaining more and more control over your own mind and your own body. That is quite a promise, isn't it?

The only requirement is that you never, <u>never</u> use a recording of these approaches when you are driving or operating machinery. Case in point: over thirty years ago when I was doing a live recording of one of my tapes, the staff in the recording studio fell sound asleep (or into a deeply relaxed state) halfway through the recording. I had to shake them to wake them up! I have also watched dozens of people in large group relaxation sessions become so deeply relaxed that they have begun happily snoring away in unison—not the best situation for the nonsnorers.

There are many relaxation scripts on the Internet, but I am going to type in one of mine for you. You can adapt it in any way you want to meet your needs. As I type the relaxing suggestions, I am going to try not to fall out of my chair in a state of loose, limp, and comfortable relaxation.

DO NOT DRIVE OR OPERATE MACHINERY WHILE LISTENING TO ANY RELAXATION EXERCISE. You can fall asleep unexpectedly while hearing suggestions of relaxation.

Script: General Relaxation with Suggestions for Good Health

Start by getting yourself comfortable, sitting or lying down, without crossing your arms or legs. Let vour eves drop closed and begin breathing freely and deeply...freely and deeply...relaxing more and more with each breath...relaxation flowing in, tension flowing out. Relaxation flowing in...tension flowing out. Whatever happens for you is just fine. Just let yourself go...relaxing more and more with each breath. No worries, no cares need bother you now. This is your time to just put everything on hold and relax completely. No outside noises need disturb you. Instead, they will allow you to relax even more deeply, even more completely. Remember, you don't have to worry about performing correctly during this experience. However you respond is just fine. Your response may vary from one time to the next...sometimes you may drift in and out of awareness, hearing parts of what is said and seeming not to hear other parts. Other times you may follow along comfortably, feeling pleasantly relaxed. Or, you may drift off to what feels like a deep, sound sleep...awakening at the end of your session. Regardless of the manner in which you find yourself responding, you can derive significant benefits from this relaxing experience, even when you feel that you have slept throughout the session. All the positive messages help you to nurture your body and your mind—helping it to maintain good health or return to a very healthy condition.

If your attention drifts away, just nudge it gently back to the messages you are hearing, messages that help you to gain more control over your mind and your body and help you to strengthen yourself physically and emotionally. As you listen, you can become deeply relaxed, perhaps much more relaxed than you have been in a very long time. Like anything else, with practice you become even more adept at using relaxation techniques. Each time you relax even more deeply, even more completely.

Just let yourself go now, drifting freely and easily...freely and easily...down, down to a more and more comfortable place. No matter how deeply relaxed you go, if you need to alert yourself and give your attention to something else, you can do so. Then, you can return to position and drift easily back down to a deeply relaxed condition, continuing with your relaxation session.

As you relax more and more, a warm comfortable wave of relaxation can begin to wash over your body, soothing and relaxing, soothing and relaxing...flowing over your scalp, soothing and penetrating, easing away all tension...flowing down over the sides and the back of your head, easing away all tension, relaxing completely, relaxing completely. The soothing wave of relaxation flows down over your face, easing away all tension...penetrating your forehead and brows...flowing over your eyes, giving them a warm, comfortable soothing bath that will give you clearer and sharper vision...relaxing completely...making you more and more comfortable, more and more relaxed. The wave of warm, comfortable relaxation flows down over your nose and cheeks, your mouth, your chin, and your jaw...letting everything go more and more relaxed...more and more limp and loose and relaxed...as the wave of relaxation flows down through your neck...penetrating the cords of your neck and head and face with so much relaxation that everything goes completely loose, and limp, and relaxed.

The wave of relaxation flows from your neck on down through your shoulders and upper arms, soothing and massaging, deep and relaxing, easing away all tension, as you go more and more loose, and limp, and relaxed. The warm, comfortable wave of relaxation flows down through

your elbows and forearms, easing away all tension...flowing down through your wrists, your hands, and your fingers...filling your arms and your wrists, your hands and your fingers with so much relaxation that tension is pushed right out through the ends of your fingers...leaving everything feeling completely loose, and limp, and relaxed as you drift deeper and deeper into that warm, comfortable state of deep relaxation.

The warm, comfortable wave of relaxation flows from your neck down through your chest, soothing and penetrating, opening up your breathing passages so that with each breath clean, fresh air flows into your lungs, bringing with it a sensation of healing and wellness throughout. With each breath that you take, this soothing and healing energy flows into your body, continuing on even after you finish your session today...each breath, day and night effortlessly brings this healing energy into your body...and with it all of your body's inner resources are mobilized, assisting you in effortlessly strengthening everything about you...bringing your body and your mind to their healthiest possible condition. With each breath that you take, day and night...without even thinking about it...this sensation of strengthening and healing flows effortlessly into your body, bringing with it a feeling of wellness, deep relaxation, and comfort.

The wave of warm, comfortable relaxation flows from your chest and lungs down through your stomach, abdomen, and pelvis...soothing and relaxing, soothing and relaxing...easing away all tension, filling your stomach with a very pleasant and comfortable sensation...assisting your stomach in maintaining ongoing comfort throughout...assisting your body and your mind in choosing the foods and beverages that you know will help you to achieve and maintain your healthiest possible condition.

The warm, comfortable wave of relaxation rests again for a moment in the back of your neck...soothing and penetrating...deep and relaxing...massaging away all tension as it flows down into your upper back and shoulders, easing away all tension, massaging away all tension...as it flows down through your middle back and lower back, soothing and penetrating, deep and relaxing...easing away all tension...flowing down through your buttocks...relaxing completely, relaxing completely...filling your entire body with so much relaxation that everything goes completely loose and limp and relaxed...loose, and limp, and relaxed.

The warm, comfortable wave of relaxation flows on down through your thighs, soothing and penetrating, flowing down through your knees, your calves, your ankles, your feet, and your toes...filling your legs and your ankles, your feet and your toes, with so much relaxation that any remaining tension is pushed right out through the ends of your toes, leaving everything feeling completely loose, and limp, and relaxed...loose, and limp, and relaxed.

With each breath that you take, you become more and more relaxed and comfortable... comfortable ...peaceful ...in love with the world and her creatures ...committed to doing all that you can to assist in some way ...realizing that you are gaining more and more control over your own mind and your own body ...that you are tapping all of your body's inner resources easily and effortlessly ...unleashing your creativity so that it can work effectively and efficiently on behalf of yourself, the world, and her creatures ...bringing your body and your mind to their healthiest possible condition. No matter how deeply relaxed you go, all your positive messages drift way down deep to assist you in strengthening your own mind and your own body...assisting you in making the healthiest choices of foods and beverages, assisting you in incorporating activities in the green environment into your life as much as possible...assisting you in incorporating consistent healthy exercise and relaxation experiences into your life...assisting you in doing your part for the world and her creatures...So pleasantly relaxed and comfortable throughout, absorbing good health, relaxation, and wellness throughout, with your body and your mind experiencing a maximum feeling of comfort and healing throughout. Deeply relaxed, completely relaxed, in a very safe and comfortable place.

As you rest comfortably, your body and your mind experience great benefits. You may even get a sense or an image of a healing white light or energy that flows throughout your body, caring for and nurturing your body and your mind, strengthening and healing, deep and relaxing. This sensation can continue right on with you through each day and night, with no effort on your part. As each day passes, you feel stronger and healthier, more and more positive throughout...both physically and emotionally.

You can omit this imagery section and write your own, if you choose:

Now, while you remain very deeply relaxed, feeling very comfortable, safe and calm throughout, you can take a pleasant journey through your memory or imagination. Whenever you choose to alter the imagery to make it more personally appealing, you can do so easily and effortlessly without disturbing your very relaxed condition. Your mind is an amazing thing and it can help you in so many ways to strengthen yourself.

You can drift peacefully through time and space to the top of a beautiful grassy knoll on a warm spring day, feeling very, very good throughout...looking down over a sloping field of early spring flowers toward a peaceful pond below.

Whenever you choose to arrive there is just fine. You begin to see the details of the knoll, as you get closer. You can see the vividness of the colors of the grass, the flowers, and the pond below. The sun can shine upon you with a comfortable level of intensity. Never burning, only comforting. You can spread a blanket upon the grass that will invite you to settle in. You inhale the fragrance of springtime and relax even more. Your sinuses remain clear and unaffected by any grasses or blossoming flowers. Everything feels very, very good throughout. If you choose, you imagine yourself there on the knoll, settling down comfortably with your blanket beneath you. No cares, no worries need bother you now. You can lie down comfortably and look up at the clear, blue sky above ...feel the warmth of the sun upon your skin...never burning...always soothing. You can inhale deeply of the fragrance of springtime, letting your body fill with relaxation and peacefulness with each breath. Feel the joy of the moment ...the delight in life...enjoying each moment to the fullest. No worries, no cares need bother you now. Let this feeling remain with you, breathing deeply and effortlessly, filling your mind and your body with joy, good health, peace, and relaxation throughout.

You feel so good as you lie there comfortably...you can reflect on all of the positive things in your life...how you can move past challenges to easier times...all of the people you care about, events from the past or the present that give you nice warm feelings... realizing how fortunate

you are...deeply appreciating each aspect of your life. You can feel very, very good about yourself as a person, proud of all of your character strengths, optimistic about your ability to develop to your maximum potential.

You find that your thoughts can be especially clear, that your ability to recall past information is superb, and that your concentration ability is particularly sharp. All of these qualities can be even more a part of you as each day passes, and you can feel better and better throughout, both emotionally and physically. You can find that you are generally more productive, optimistic, and that you appreciate each moment to the fullest feeling very, very good about your life and your future.

While you continue to relax comfortably on that grassy knoll, you can learn to reach this pleasant level of relaxation whenever you desire. This can be very easy for you and can produce very helpful results. Whenever you want to refresh yourself quickly and enhance your health, you find that all you need to do is close your eyes, take three deep breaths, and think to yourself, "Deep relaxation." Then you drift right down to that deeply relaxed place where you are right now...or perhaps even deeper ...and you rest there for as long as you want. If you choose, you can drift easily and effortlessly to some pleasant imagery from your memory or your imagination, to a place where you feel very deeply relaxed and comfortable, examining all the details of that place through your mind's eye...feeling, hearing, smelling, tasting, and seeing all aspects of that place even more deeply. You can also focus on aspects of your life that you want to strengthen related to healthy lifestyle habits or improved health.

Whenever you use this brief relaxation technique in the future, after you have rested as long as you want and are ready to return to a fully alert state, you can count slowly backwards from ten to one, bringing yourself gradually back to an alert condition. At the count of five, you open your eyes but you might not be fully alert. At the count of one you are completely alert...relaxed, yet refreshed, with renewed energy...feeling very, very good throughout, both physically and emotionally.

You can feel confident that you can use this technique whenever you want to bring on a deep relaxation response and wonderful imagery of very special places from your memory or your imagination. Now, you can move away from your instruction in this relaxation technique, and let yourself drift back to the grassy knoll on that warm spring day. In your mind's eye, see how green and fresh the spring grasses are, how each blade springs up through the ground to greet the day. If you put your nose close to the ground, you can smell the sweetness of the grass and the earth. As you rest on the cushion of grass beneath your blanket, you can sink deeper into comfort and relaxation, feeling very, very good throughout. With each breath that you take, the fresh spring air can fill your lungs, soothing and healing, soothing and relaxing. You may get a sense or a feeling of the warm, gentle spring breeze caressing your relaxed body. You breathe freely and deeply, freely and easily. The sky is a deep, rich blue and the sun shines down upon you, always soothing, never burning. You may notice the call of a bird, the sound of the water lapping against the shore below, or the breeze blowing gently through the trees at the edge of the field. You can carefully examine all that is around you, making what you want of it, enjoying this special place as much as you choose.

Perhaps you will even get a sense, or a feeling, or an image in your mind's eye of a butterfly that has landed near you on a spring flower. Your eyes trace the gentle curve of the flower's stem up to its blossom where the butterfly perches. The flower can be any color or species that you want, as can the butterfly. Examine the intricate detail of the butterfly's wings, how her tiny legs hold the flower...the clear definition of the colors and designs on her wings...the slight movement as she rests there beside you. If you choose, you can invite her to climb gently upon your finger and sit there for a moment before you encourage her to lift herself into the air to fly to her next destination.

For now, you can relax a bit longer on that grassy knoll, examining every detail. You are feeling very, very good throughout...focusing on the pleasant state you are in and feeling very comfortable in your ability to integrate relaxation techniques and positive imagery into your life. You can thoroughly experience what it is like to be there on that lovely knoll for a little while longer, inhaling the fragrance of springtime, letting each breath fill your body with good health and relaxation. Feel the warmth of the sun upon your body, always soothing, never burning. Hear the sound of a light breeze stirring the leaves upon the trees, the gentle lap of waves upon the shore of the pond below, the song of a bird in the distance. Experience the joy of the moment, the delight in life, and rest comfortably for a little while longer, realizing that you can return to this pleasant, relaxed state whenever you desire, and totally enjoying this wonderful condition of body and mind. And, remember, all of the benefits of deep relaxation and the suggestions for wellness that you have heard today continue right on with you even after we finish our session, strengthening and healing your body with each breath that you take.

In a few moments, you can drift away from the grassy knoll and back to a fully alert state, feeling very, very good throughout, both physically and emotionally, feeling as if you have just had a deep, refreshing night's sleep. With each experience similar to the one you used today, you can derive even greater benefits. You can enjoy using your relaxation techniques on a daily basis, in concert with a healthy diet, regular exercise, and a deep and satisfying engagement with the world and her creatures.

Now, to help you gradually return to full alertness, let's begin to count backwards from ten to one. With each number, you will come closer to a fully alert state. At the count of five, you will open your eyes, but you may not be completely alert. At the count of one, you will be completely alert, feeling relaxed, yet refreshed with renewed energy. You will have no stiffness, heaviness, numbness, or pain in any part of your body and will be feeling very, very good throughout, both physically and emotionally---relaxed, yet refreshed, with renewed energy.

Ready...10...starting to drift back through time and space...the scene on the grassy knoll is starting to fade, but you can return whenever you choose...9...8...by the time we reach the count of one you will have returned to your previous setting and will be completely alert, feeling very, very good throughout, much better than when we began this session. At the count of 5 you open your eyes, but you might not be feeling completely alert...7...6...5...opening your eyes, coming back from the grassy knoll to the present...4...3...2...1! Completely alert, refreshed, yet relaxed, with renewed energy...No pain, stiffness, heaviness, or numbness in any part of your body.

Feeling very, very good throughout, both physically and emotionally. Looking forward to the rest of the day and evening, looking forward to each new day.

There are so many routes to relaxation, visualization techniques, and a healthier lifestyle. The key is to find what works best for you and incorporate some of these techniques into your routine. The more you use any relaxation approach, the easier it is to derive benefits. Like anything else, practice will help. You can learn to impact the way you are feeling during difficult periods, refresh yourself when you are fatigued, and move through surgery with little or no anesthesia, followed by a quicker recovery.

As a devoted multi-tasker and athlete, I have found that an additional approach works well for me. When I am paddle boarding, running, hiking, or engaged in other activites, I focus deeply on the world around me, as I say my thankfulness prayer (found in the Spirituality section of this document). Simultaneously, a powerful stream of healing, shimmering golden light flows into my body. I send concentrations of this light and love to parts of my body that need it and have a visual image of my body and mind in their healthiest possible condition. As the shimmering, golden healing light continues to build, I send much love and healing light to the world and her creatures. What goes out is replenished. Does it work? It certainly feels like it. I am a 70-yearold with a bad cancer diagnosis, but I am filled with as much energy and optimism as anyone I know.

Visualization: Choose and use a variety of relaxation techniques on a regular basis to keep you feeling more relaxed, less fatigued, and more positive during challenging times. Try a relaxation technique out today.

DELVING INTO THE DETAIL

"Nature will bear the closest inspection. She invites us to lay our eye level with her smallest leaf and take an insect view of its plain." Henry David Thoreau

Closely examining the detail of the natural world is an important part of the visualization process. Our memories enable us to bring those details back whenever we choose. If we want, we can be creative and use our imaginations to add to those memories. Following are three photos to examine in detail. You can then practice some visualizations with them. Then, try some focusing and visualization with objects around you. Take a favorite painting, photograph, sculpture, or other object that brings you pleasant feelings, and study it in the same detail that you did with my photos. Practice with some other items that capture your attention.

Try the same approach with a favorite musical piece or theatre video.

Then, do the progressive body relaxation exercise you used earlier. From that, transition into a recollection of any of the things you have focused on, and go into their details.



Please study this photo carefully. Begin with the sky and absorb the depth of the color. Close your eyes, get a strong sense of the picture, and imagine a seagull or a crow flying on the wind. Focus on the call of the bird and the sound of the surf below.

Now examine the vegetation. Go deep into the dark green of the spruces and pines. In your mind's eye, imagine that you hold a piece of conifer in your hand. Close your eyes and recall the scent of that conifer.

Take a really close look at the granite ledges. Think of yourself finding a safe and comfortable place on the upper part of the ledges. Close your eyes and imagine yourself sitting there in warm sunshine. Listen again for the sound of the surf and feel the warmth of the sun. Breathe in, and imagine the scent of the sea.

Focus now on the water. Look closely at the hues of the surf, and consider what lives beneath the ocean's surface. Let your mind's eye go there, and examine the detail. Then, open your eyes, and try the next exercise.



This snowy owl awaits your perusal, as she looks at you. What does she see in you, and what do you see in her? Even in a photograph, can you feel a connection with this creature? Study her carefully, and then close your eyes. Recall her gaze and her sleek feathers. Select a portion of the owl, and examine it carefully. Close your eyes again, and recall the detail in your mind's eye. Then, open your eyes, and look at the owl again.



This beloved pollinator, the monarch butterfly, enjoys a treat as you go deep into the details of his form, color, and wing patterns. Study this photo carefully, close your eyes, and get a vision of what you recall. Concentrate on the monarch, and think of what it would be like if your hand took the place of the flower. Can you experience the sensation of his little feet upon your hand? Can you think about what you can do to help to protect this precious species?

The following common fauna and flora will likely stimulate strong visual images for you. I will add some personal tidbits. Try envisioning each living thing, and recall your interaction with it. Write a few sentences about it, if you choose.

Gray Treefrog (*Hyla versicolor*)

With great excitement, my young garden helper calls me to the daylilies and reports, "The fairy frogs are here!" Deep within the throats of many daylilies, tiny sticky-footed frogs peek out. Never again will I look at a daylily without trying to see a fairy frog within. Sometimes they are there.

Porcupine (*Erethivon dorsatum*)

Have you ever seen a porcupine village? Some day when snow covers the ground, look for a dirty track covered in sawdust. Follow that track to a cave of roots or a woodpile. As you peer inside, you may be so fortunate as to see a fat, quilled butt sticking out. That would be your porcupine who, after a busy day of chewing trees, has dragged himself through the sawdust at the base of his tree and slogged his way through the snow all the way back to his home. On one cross-country ski adventure, Ben and I found eight porcupines ensconced in eight homes in a porcupine village.

Atlantic Puffin (Fratercula arctica)

Everyone love puffins, with their colorful bills and bold eyes. You can see them in the waters off Petit Manan and Machias Seal Island. Perhaps you remember Florence Page Jacques' poem, "Oh, there once was a puffin, just the shape of a muffin; And he lived on an island in the deep blue sea; He ate little fishes, that were most delicious; And he had them for breakfast, and he had them for tea…"



Paper Wasps (*Vespula vulgaris*) have an unfair reputation, as they are one of the more docile wasps, unless bothered. My introduction to them came when I stepped on one at age four, an

29

experience forever etched in my mind. Their beautiful hanging nests have individual egg cells, later filled with food for their young. Preferred foods are nectar and plant secretions, although they also prey on other insects.

Hummingbird Moth (*Hemaris sp.*) is a pollinator so much resembling a tiny hummingbird that it is often mistaken for a bird.

Humpback Whales (*Megaptera novaeangliae*) are routinely seen off Mount Desert Rock, where naturalists can identify individuals by their distinct markings. These large whales are quite acrobatic and provide impressive displays for viewers. One sail through Massachusetts Bay found us amidst hundreds of humpbacks, many of which spouted, breached, and rolled well into the night. As I steered though the darkness, we skimmed by one very long whale back.

Common Dandelion (*Taraxacum officinale*) The bane of the perfect lawn-minded, the familiar fluffy yellow blossoms of this plant are a favorite food of honey bees and should be left unmowed when possible.

Delving into the Detail: Examine the intimate details of the natural world around you. Etch them into your mind, and recall them with pleasure; study a piece of art, listen to music, watch a performance, and look into and feel the details of all with pleasure.

VETTING: CHOOSING HEALTHY APPROACHES THAT WORK

"If we could give every individual the right amount of nourishment and exercise, not too little and not too much, we would have found the safest way to health." Hippocrates, 460-377 BC

You have the opportunity to vet and choose the engagements that can keep you going at full speed every day and help you if you are facing a challenge. Please don't worry about doing everything perfectly.

TACKLING TWO UNIVERSAL PROBLEMS

"Over every mountain there is a path, although it may not be seen from the valley." Theodore Roethke

RELIEVING STRESS

"With a broken hip, at my age I know it is going to take a long time to recover. I have been so addicted to my walks and skis. Sometimes I still do some running. I just don't feel right without it. What am I going to do? And, what about all of the other things I have to worry about?" Sam speaks from his hospital bed, looking toward an uncertain future.

Sharon looks at me frankly, takes a deep breath and lets go. "I feel so guilty about this, but if my stepdaughter moves back in with us, our whole life is going to change. We can't refuse her. She is family, and she is trying to put her life back together. But, I just don't see how we can cope. Privacy in our new little house is going to be non-existent. It is built for two old people. She blasts music constantly and eats everything in sight. I can't deal with this."

Edna is in tears. "Mom is in Oklahoma, and we live in Maine. She is exhibiting signs of Alzheimer's, and I need to help her make some changes. But, my own life feels so overwhelming right now between kids, and work, and trying out a new relationship. How can I cope with all of this, as I move my mother east? I need to find a healthy way to get through each day because I am running myself into the ground. I know I am eating all of the wrong things, and I get no exercise. I do not have time to get out of the house except to work."

Q: What challenges are you facing, if any?

If you have a difficult situation in your life, why wouldn't you feel stressed? You are moving through a challenging period, you are dealing with a medical situation, someone you love is in crisis, or some other event is feeling overwhelming. Stress is a part of all of our lives, at least from time to time. Sometimes it comes from positive events—marriage, retirement, pregnancy, and outstanding personal achievements all rate high on stress scales. Hans Seyle, an early pioneer of stress research, labeled this kind of stress "eustress". More often, however, we connect stress with the distress of pressure and trauma. When we are faced with a medical or other crisis, as might be expected, our stress index skyrockets. For "senior citizens" over the age

of fifty, Stanford University neuroendocrinologist Robert Sapolsky stated, "We now know that aging is about a body that doesn't deal well with stress anymore." 1

Stress has been defined as a physiological reaction to one's mental activities that causes an internal and external reaction. Among other things, this reaction can lead to a pounding heart, tense muscles, trembling, sweating, nausea, and shortness of breath. Psychological implications include confusion, a shortened attention span, depression, and anxiety. At a critical level, this can result in dysfunction and debilitation, as well as an increase in susceptibility to illness, hormonal imbalance, and suppression of the immune system.

Sheldon Cohen, Ph.D., author of the *Perceived Stress Scale* (*PSS*)₂, offers a way for you to investigate your own level of stress with this classic stress assessment instrument. Cohen states, "The questions in the PSS ask about your feelings and thoughts during the last month. In each case, you will be asked to indicate how often you felt or thought a certain way. Although some of the questions are similar, there are differences between them, and you should try to treat each one as a separate question. The best approach is to answer fairly quickly. That is, don't try to count up the number of times you felt a particular way; rather indicate the alternative that seems like a reasonable estimate.

The scores on the PSS do not reflect any particular diagnosis or course of treatment. They are meant as a tool to help assess your level of stress. If you have any further concerns about your current well being, please contact your health care provider.

Perceived Stress Scale

For each question, choose from the following alternatives:

0-never 1-almost never 2-sometimes 3-fairly often 4-very often

1. In the last month, how often have you been upset because of something that happened unexpectedly?

2. In the last month, how often have you felt that you were unable to control the important things in your life?

3. In the last month, how often have you felt nervous and stressed?

4. In the last month, how often have you felt confident about your ability to handle your personal problems?

5. In the last month, how often have you felt that things were going your way?

6. In the last month, how often have you found that you could not cope with all the things that you had to do?

7. In the last month, how often have you been able to control irritations in your life?

8. In the last month, how often have you felt that you were on top of things?

9. In the last month, how often have you been angered because of things that happened that were outside of your control?

10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

To determine your PSS score, follow these directions:

First, reverse your scores for questions 4, 5, 6, 7, and 8. On these four questions, change the scores like this: 0=4, 1=3, 2=2, 3=1, 4=0

Now add up your scores for each item to get a total. My total score is _____. Scores ranging from 0-13 would be considered low stress. Scores ranging from 14-26 would be considered moderate stress. Scores ranging from 27-40 would be considered high stress.

Q: What can you do to lower your stress level, even when you are dealing with critical illness or overwhelming life circumstances?

There are several strategies that produce a powerful and effective approach to stress management. I will keep reinforcing them throughout this document, for they are the tools that will keep you in the healthiest place.

Evaluate your eating habits, increasing your consumption of vegetables and fruits and cutting back on meats and fats. Take a look at charts related to foods and what they provide. Eliminate or cut back dramatically on the consumption of alcohol, caffeine, sugar, salt, and the use of nicotine. All of these substances exacerbate stress reactions.

Release your feelings through a variety of venting techniques. **Talk** to your friends and family members or a therapist, **write about your feelings** in a journal, and **express yourself creatively**, perhaps through painting, drawing, clay work, gardening, or dance.

Indulge in a pastime that draws out the quiet beauty within you, reminding yourself that life is a journey, not just a destination. **Find opportunities for play and laughter**. **Enjoy your sexuality**.

Volunteer on behalf of your passion. Giving of yourself and making a difference to someone or something else will do much for you as well.

Express thanks for something each day—to God and the universe, to family members, and to friends. Regardless of how difficult things are, there is always something for which to be thankful. Expressions of thankfulness can help to put life in perspective and give others good feelings.

Get yourself outdoors into the world that is provided for you, at a level that is comforable for you. It is a gift that you can give your body and your mind that will pay you back a thousand times over. Enjoy it in every way that you can, both in quiet contemplation and active engagement. Working up to a minimum of 30 minutes of sweat-producing exercise several days a week can do much to release stress-induced tension. Through snow, sleet, rain, hail, or a beautiful day, please walk, run, bike, ski, jump rope, or choose another appealing activity that will give you a physical workout.

If you can't get outdoors, choose indoor exercise, even something as simple as going up and down stairs, doing stretching exercises, or doing laps inside your house. If you are on a machine, try to position it so that you are looking out a window or at an area where you have houseplants. Investigate some of the nature-related videos that can take you into the natural world while you use a treadmill or other machine. Tailor your activity level to what is going on in your body, and speed up or slow down accordingly. There is some evidence that says that several bursts of activity throughout the day are more productive than one concentrated activity surrounded by inactivity, so consider trying this approach. We just need to keep moving as much as we can in whatever way works for us at a given point in time!

Engage with nature and the world indoors as well. Watch your fish swimming gracefully around their tank. Interact with your family and your friends. Give your plants a warm shower, as you examine the details of their beauty. Brush your cat or dog, giving yourself and your pet some of the contact with another living thing that we all crave. Listen to a lecture about a nature-related topic. Do some research on a species you want to know more about. Watch a video that features beautiful scenery and the kind of activities you enjoy. And, of course, **engage in the relaxation techniques** that can transport you through your mind's eye to the natural world that you love.

Incorporate relaxation techniques into your daily routine and experience the sense of cruising in neutral. Choose from or use a combination of progressive body relaxation, visualization, self-hypnosis, yoga, meditation, or relaxation recordings. Give yourself the gift of 20-30 minutes each day in a deeply relaxed state, offering your body and your mind an opportunity to restore themselves. Regular sessions of these techniques can lower your blood pressure, reduce stress, and help to alleviate pain.

If you are in medical crisis, follow your doctor's orders and listen to your own mind and body.

Stress Management: Eat well; release your feelings; play, laugh, be creative; volunteer and make a difference; give thanks each day; get outdoors as much as possible; exercise outdoors and inside at a comfortable level; engage with nature and living things indoors and outside; use relaxation techniques on a regular basis; listen to your own mind, body and medical experts.

Follow this program for one month, using other healthy lifestyle habits as well, and evaluate how much you have impacted your stress level by using the Perceived Stress Scale again. The chances are good that you will find that you are coping better in even the most difficult of circumstances. Let's look now at another common problem that is particulary evident in stressful times.

OVERCOMING SLEEP DIFFICULTIES

Sleep disruption is a problem that most of us have faced at some point. To learn more about how to approach the issue, let's take a look at "Michael's" hypothetical situation.

Dark-circled eyes underscoring the validity of his tale, 32-year-old Michael recounts the thirty consecutive nights he has spent lying awake staring at the ceiling. His usual pattern is to fall asleep soundly after going to bed at about 11:00 and then to jolt to full alertness around 2 AM. He focuses on all of the challenges facing him at work and in his personal life and wrestles with each issue. Typically, it is at least two hours before he drifts off to a sound sleep again. At 6 AM, his ringing alarm clock demands that he rise and begin the day.

The last two weeks have been much worse for Michael. He had learned to live with his 2 AM wakefulness, but the shock of losing his job has thrown him into a period of serious insomnia. He has been worrying about keeping up with the demands of work for quite awhile, but he never thought he would be fired. He struggles to get to sleep each night, tossing around until he flits in and out of a fitful sleep. Each time he drifts off, a thought of what job loss might mean startles him to alertness. Everything seems worse during these nighttime hours, and he has a hard time remembering that he has some good, marketable skills. He worries about what changes will need to be made if he can't get another job, the implications for his health insurance, and the pressures on his family. When dawn finally breaks, he struggles out of bed, exhausted, depressed, and ill-equipped to face a day of trying to find work. Michael's responsibilities have not changed. He has financial obligations and a family to care for. His wife has a minimum wage job, and they need his salary to survive. He is angry and overwhelmed at having his life disrupted by this unanticipated job loss, and he worries constantly about how he is going to manage. Nighttime anxiety and loss of sleep are draining him of the energy he needs to get through each day. In order to cope, he has developed a pattern of napping for two hours in the afternoon before going to his children's evening events.

We talk a bit about any other changes in the way Michael has been operating since his boss let him know that his position was being cut. He reveals that he has started having a few drinks each evening before bed to help him relax and that he has been too tired most mornings to get out for his usual walk.

Most of us have known the frustration of sleep disruption, and many of us are familiar with real insomnia. Once a pattern of poor sleep begins to emerge, it is easy to go into a panic about how many hours we are getting, spending part of the "2 AM Terror" time worrying about how to get in enough hours to manage the next day. When we are facing illness or other crises, it is even more critical that we sleep well. Unfortunately, we are also more inclined to wake and worry. It can be quite a vicious cycle. This is what is happening for Michael, in addition to his concerns about his job loss.

Q: Do you have chronic worries that disrupt your sleep?

Q: How can we help Michael and ourselves to manage this very important issue? First, let's look at what Michael can do, or what we could do in a similar situation, to immediately improve the chances of getting a good night's sleep. Creating a comforting environment that is well-ventilated, dark, and designated for sleep is an important start. Earplugs and white noise from a fan can help to block out distracting sounds. It is important to have the bedroom cooler at night as well. Meals should be concentrated in a ten hour window, starting an hour or so after waking and ceasing three to four hours before bedtime.

Q: Do you sometimes or regularly have alcohol, caffeine, or sugar at night?

Q: What is your sleep like on those nights?

We know that alcohol precipitates sleep disruption, often giving the consumer a false sense of falling into restful sleep, only to wake a few hours later unable to relax. The healthiest thing we can do is to throw out the window the idea that alcohol in any way positively impacts sleep patterns, getting rid of it during periods of stress or insomnia. The initial sedation that alcohol offers promises sleep disruption later on. Despite the fact that a fine glass of wine or a good rum punch may be a treat, alcohol is really not a great buddy. If you want a drink, have one occasionally, realizing that you may pay for it at 2 or 3 AM.

In Michael's case, he immediately began to cut back on the alcohol, limiting himself to a drink two nights a week. He was not a smoker and was not inclined to eat sweets. Caffeine, however, was a substance he used throughout the day. In order to reduce anxiety and minimize sleep disruption, Michael gradually cut his coffee intake to two 8- ounce cups prior to noon. He was given this information obtained from the Center for Science in the Public Interest:

Substance	Caffeine Content	
Black Coffee (12 oz.)	260 mg.	
Black Tea (8 oz.)	30-80 mg.	
Soda (12 oz.)	30-70 mg.	
Dark Chocolate (1.45 oz.)	20 mg.	
(Recommended Maximum Daily Allowance for Healthy Adults is 400 mg. of caffeine.)		

If you are having trouble sleeping, take a look at caffeine and sugar consumption as sleepdisrupters. Consider limiting or eliminating them. Any caffeine consumption should be minimal and is less disruptive to sleep if it ceases by noon. Desserts and treats consumed at lunch are much less likely to impact sleep than those at dinner, when it is important to keep blood sugar in check. Nicotine is recognized as a sleep disrupter as well, giving us one more reason not to use it. Avoid loading up on a huge meal in the evening. Much sleep disruption stems from digestive problems. Eat well and in reasonable quantity, making sound nutritional choices that will help to strengthen your body, so it is better prepared to cope with stressors.

Many of the foods that help to induce sleep are right out of our green environment: leafy green vegetables, bananas, pineapples, tofu, roasted soybean foods, beans, asparagus, lentils, and avocadoes. The post-turkey-dinner discussion of the sleep benefits of tryptophan, an amino acid that produces niacin and creates serotonin, is familiar to many of us. To encourage relaxation, sleep, and mood stability, boost serotonin production by consuming pumpkin seeds, nuts, tofu, cheese, roasted soybean foods, or turkey. Thiamin (Vitamin B1), found in sunflower seeds, salmon, and trout, also helps improve your sleep. Beans, lentils, spinach, avocado, and
asparagus contain folate (Vitamin B9), giving you daytime energy and nighttime sleep. More suggestions are in the Nutrition section of this document.

Michael had ceased his morning walk, due to fatigue from sleeplessness. As he cut back on the alcohol, caffeine, and sweets that were causing some of his problem, he began getting out the door again. He also picked out a rescue dog at the local shelter who depended on him for walks.

The return for an investment in any exercise—even the treadmill or the sidewalk—is more energy, less tension, more restful sleep, and a body better-equipped to deal with whatever it faces. Grab what you can when you can. Do whatever feels appropriate at a particular point in time. For Michael, that meant getting out for his daily walk. Bear in mind, if you are into aerobic activities, that doing them right before bedtime can push one into alertness and disrupt sleep. Save the aerobic exercise for other hours, and instead take a lukewarm bath just before going to bed. This can begin to lower your body temperature, improving both sleep quality and quantity.

The temptation to begin taking naps to make up for poor sleep is hard to resist. A relaxing break in the day can be very important. But, rather than give in to naps on their own, we can gain more benefit through learning relaxation techniques that will help to boost our energy during the day and relax us enough to get to sleep at night. Of course, if we are ill or recovering from surgery, our bodies may need extra sleep whenever it occurs in order to help us rebuild. In the typical course of life, however, naps in the late afternoon or evening can push us into disrupted nighttime sleep. Rather than succumbing to naps that can alter our sleep patterns, it can be effective to begin using a 20-30 minute recorded relaxation script for a boost.

Wakefulness and sleep disruption can sometimes be eliminated if we settle down for sleep a little later than usual. Engaging in an evening activity that keeps us alert, going to bed an hour later than normal, and setting the alarm for our usual waking time for a few days in a row often helps to compress sleep time and reduce sleep disruption.

If worries are a part of what is making it hard to have a restful night's sleep, it is important to vent these problems during the day. Talking to friends, family, or a therapist can offer successful venting. Writing about the issues and how we plan to deal with each of them can also be very effective. When we are ill, gaining a sense of control through becoming an active part of our treatment team can also go a long way toward helping us to relax. Repetitive worrying while trying desperately to sleep is non-productive. It can be very helpful to get up, write down the worries to attend to the next day, engage in a quiet activity for a half hour or so, and then go back to bed. A preventive approach is to set aside 15 minutes each day to expel worries. Write down your worries and some ways you can impact them. Then, if you wake up and worry, tell yourself that you are already working on the problems.

Sometimes our worries can be so significant that they manifest themselves as nightmares. One of the most effective ways of reducing or eliminating nightmares is through the use of systematic desensitization. Begin by writing down the nightmare in as much detail as you can recall. Do this while you are in a relaxed setting and condition. Then re-write the nightmare, transforming the details to make them friendly and non-threatening. Practice visualizing the new script while

you are in a relaxed state. If the nightmare recurs, try stepping outside it, altering it to the new script and relaxing confidently. Without realizing that I was engaging in dream manipulation and lucid dreaming, as a child I transformed my recurrent nightmares into positive experiences. The vicious and hungry wolves that had terrified me for years became my guides, as I became their caregiver. Eventually, they led me to a visit with my deceased father and to a much more peaceful life space. Sounds weird? Well, it worked.

The first thing to do if you have trouble getting to sleep is to not try to force it. Instead, do something relaxing like reading a really boring book until you feel tired. For me, that would be something like *121 Reasons to Re-Learn Calculus*. Sleep onset difficulties, as well as sleep maintenance problems, can also be lessened or eliminated through the use of deliberate focusing and progressive relaxation techniques. Our grandmothers' suggestion that we try counting sheep is not silly at all. Focusing on anything other than the problem at hand can help us to be more relaxed. Counting sheep, counting backwards from 1000, or counting horses jumping over fences, the way I did as a child, can all result in drifting off to sleep.

Q: What relaxation techniques do you use?

As you keep hearing from me, progressive body relaxation is very effective. Use a script for progressive relaxation, create your own visualization and go deep into its details, or simply focus on telling each part of your body to relax. Begin with the top of your scalp; move over your face, sides and back of your head and the cords of your neck; go down through your chest, abdomen and pelvis; down again through your shoulders, upper back, lower back and buttocks; down each arm all the way to the ends of your fingers; and down each leg to the ends of your toes. The chances are good that this exercise alone will help you to fall asleep.

It is important to note that many of us will at some point be offered medication to assist us with sleep disorders. The media bombards us with this "easy" solution and too many physicians offer prescriptions before considering drug-free alternatives. This is not to say that a sedative following surgery is inappropriate or that in extreme cases medication should not be considered. All sedatives, however, can be habit-forming over time and complicate any attempt to pursue holistic approaches.

So, have we solved Michael's problems? We certainly haven't found him a new job. It is likely, however, that we have given him some tools that will help him to recover a healthy night's sleep, incorporate these approaches into his life plan, and ensure him that, during stressful periods, he knows how to encourage restful sleep. Beginning by helping Michael get some sleep is a start. Now, we need to help boost his confidence in himself, put depression behind him, and get on with life. That is another story. For now, let's look in more detail at how nutrition and exercise can impact sleep, as well as your broader health picture.

Sleep Well: Use relaxation techiniques, a healthy diet, appropriate exercise, and other approaches that nurture sleep.

NUTRITION: YOU ARE WHAT YOU EAT

You are going to love this little nugget from my memory. Somewhere along the line, I read a study of rats and nutrition. My apologies go through the ethers to the scientists who conducted this study, as I can nowhere find reference to it now. As we think about good nutrition and the impact that it has on how we feel and how we act, this rat study is a great illustration of the dire consequences that dietary choices can have for our behavior. We do know that we are a lot like rats, and that some of us may be more rat-like than others. For three months, four groups of rats were fed four different diets. The rats that were fed natural foods and clean water (group 1) remained alert, curious, and calm. The rat group that dined only on hotdogs and water (group 2) became violent, fighting aggressively and biting off their own tails. Some even bit off their own tongues. The rats that ate sugar doughnuts and drank cola (group 3) slept fitfully. They did not huddle with their rat friends, as rats normally would do, but instead hunkered quivering in corners, unable to function as a social unit. When approached from outside the cage, they became extremely fearful. The rats that ate sugar-coated cereal and drank fruit punch (group 4) ran around and around their cage in a hyperactive, aimless, and nervous manner. Some hung upside down from their little rat homes. Hmm. We could take some lessons from that study, whether we are old folks, young folks, sick folks, or busy folks.

A 2016 study, published in Mayo Clinic Proceedings and based on data gathered from the National Health and Nutrition Survey that included a nationally representative sample of 4,745 Americans, found that "fewer than 3% of American adults follow the heart-healthy lifestyle of eating a healthful diet (eating plenty of fruits and vegetables and whole grains and avoiding saturated fat), not smoking, being physically active (at least 150 minutes of moderate exercise a week), and keeping weight and body fat (20% for men and 30% for women) down." ¹³

We all slip up and inhale the six cookies or bag of Goldfish occasionally. We don't need to beat ourselves up about it, but it would behoove us to pay attention to some of the information that we see time and time again. It will make a difference because we are, indeed, what we eat. A helpful note from McGill University suggests breaking food cravings by looking out a window at the natural world or by interacting with an animal. So, focus on a nearby tree or garden and pat your puppy.

Mood Foods

For the fun and education of it, here is a collection of foods that may have positive ramifications for your body and your mind. Unless we are allergic, they will surely do no harm as we age or undergo stress. Please consult your physician if you are experiencing difficulties with anxiety, pain, fatigue, stress, depression, or illness. While dietary changes can be helpful, they may be only a part of the puzzle.94, 95, 96, 97, 98, 99

Foods to Help with Relaxation

potatoes, root vegetables, popcorn, pasta, rices, whole grains, oatmeal (any high fats/protein eaten within 4 hrs. of carbs will negate their sleepiness effect), seeds, Sugar free walnuts or almonds, tofu, dried fruit, beans, peas, spinach, dark greens, kiwi, bananas, sardines, salmon, shellfish, turkey, chicken, milk, chamomile tea

Foods to Help with Pain Relief

seeds, nuts (high fructose corn syrup on nuts interferes with copper absorption), spinach, sardines, salmon, almonds, skim milk, yogurt, cheese, nuts, seeds, whole grain pasta, whole grain bread

Foods to Help Alleviate Fatigue

sardines, salmon, chicken, beef, beans, nuts, tofu

Foods to Help Combat Stress

bananas, dried fruits, oranges, strawberries, apples, carrots, spinach, red bell peppers, beans

Foods to Help Fight Depression

salmon, sardines, tuna, other oily fish, walnuts, flaxseed, leafy greens, seafood, spinach, asparagus, beans, seeds, parsley, winter squash, wheat germ, chicken, meat (in small amounts)

Foods to Help Protect the Body from Illness

eggs, meat, lima beans, oysters, clams, wheat germ, safflower and sunflower oils, spinach, leafy green vegetables, lentils, beans, peas, broccoli, cabbage, dried fruits bananas, avocados, chicken, carrots, citrus fruits, brussel sprouts, strawberries, sardines, other fatty fish, sweet potatoes, figs, cantaloupe

Looking for a way to lose weight and stay healthy? Try this. Before eating anything else in a day, feed yourself from this list. (Throughout the day, drink your RDA of water):

1 cup of cooked oatmeal with $\frac{1}{2}$ chopped apple, $\frac{1}{4}$ cup frozen blueberries, and some low-sugar cranberries mixed in while cooking. More fresh fruit and soymilk or skim milk added before serving.

1 cup of berries
1 cup lowfat plain or fruit yogurt
1 cup of cooked leafy greens (spinach, kale, beet greens, chard, etc.)
1/2 cup of cooked beans, lima beans, peas, or asparagus
1/2 cup of squash
1/2 cup of carrots
1 tomato
1 can of sardines
1 orange
1 banana
another fruit of your choice
another vegetable of your choice
1 serving salmon, trout, chicken, eggs,
sprouted lentils, peas, or beans
1/8 cup sunflower seeds

Hints to Make Foods Healthier:

Use soymilk in soups and sauces. Use skim or low fat milk. Use two egg whites instead of one egg in recipes. Use yogurt in place of mayonnaise. Avoid refined sugar and flour. Purchase low sodium foods and canned goods. Avoid imitation meats. Avoid prepared packaged foods.

Nutrition: Make the healthiest choices you can. Build your supply of "Mood Foods." Toss out unhealthy foods and beverages now.

EXERCISE: THE BEST OF IT IN THE GREEN OUTDOORS

"In every walk with nature one receives more than he seeks." John Muir

Exercise is important for releasing tension, elevating our moods, increasing fitness, and improving the quality of our sleep. Maintaining a regular exercise pattern is particularly helpful during stressful periods and while aging, even if it means adapting our routine to the demands of illness or injury.

Without pushing yourself to exhaustion, give your body a gift of exercise even when it is not at its healthiest. Do what feels right for you. Exercise outdoors in the green environment is well-documented as being much more beneficial than indoor exercise ^{100, 101, 102, 103, 104, 105}, but any exercise is better than none at all. In this era, physicians affiliated with the Green Scripts phenomena are writing prescriptions for outdoor exercise as a part of patient treatment plans. This approach has its roots in the 1920's when outdoor enthusiasts including Columbia University's Dr. George Meylan, a physician and president of the American Physical Education Association, purported that outdoor engagement amplified the effects of exercise.

According to the Centers for Disease Control and Prevention, fewer than 25% of American adults get the recommended amount of aerobic exercise and strength training each week. It is shocking to acknowledge that the average American child spends only four to seven minutes each day in unstructured outdoor play and more than seven hours a day in front of an electronic screen. The American Academy of Pediatrics recommends a minimum of 60 minutes of unstructured play per day. The significant benefits of outdoor exercise for children include stress levels that fall within minutes of seeing green spaces.¹⁴ Dr. Robin Puett of the Maryland Institute for Applied Environmental Health conducted a large-scale study that concluded that people who exercised partially or entirely outdoors exercised more. Puett stated, "Our study suggests that exercising outdoors, whether alone or combined with indoor physical activity, may be linked to better self-perception of health and emotional outlook, as well as reduced tension, for women and more active adults."¹⁵

A growing body of medical research began to build in the early 2000s, and by 2005 the American Psychological Association was endorsing exercise as a legitimate third form of treatment for depression, along with psychotherapy and medication. Several studies demonstrated that in addition to the renowned endorphin-releasing "runners high" that produces a temporary lift, continued relief from a depressed mood can set in after several weeks in a regular exercise program. That is substantiating evidence for those of us who know in our hearts that aerobic activity helps us to feel well and that any exercise in the outdoors is a terrific mood enhancer.

A study reported in *Preventive Medicine* of 1,140,000 adults was aimed at assessing whether exercise could act as a depression preventative. Several large-scale studies met the criteria with pre- and post-study objective measures of the participants' aerobic fitness and standardized evaluations of their mental health. Results indicated that men and women with the lowest level of fitness were 75% more likely to have been diagnosed with major depression than those who

were most fit.₁₈ In addition, a study in the *Journal of Psychiatric Review* reported that moderately strenuous exercise, like jogging or brisk walking, had a significant effect on depression according to 25 pooled studies, with mental health improving considerably if participants diagnosed with depression were exercising.₁₉ *Neuroscience and Biobehavioral Reviews* 'February 2016 issue reports on the analysis of twenty past studies in which blood samples were obtained from individuals with major depression before and after they exercised. Results indicated that "exercise significantly reduced various markers of inflammation and increased levels of a number of different hormones and other biochemicals that are thought to contribute to brain health."¹⁷

As a trail runner, my mind drifts away as I trot along wooded paths that stretch to open vistas of lakes, mountains, and the sea. The scent of evergreens and seaweeds mixes with the feeling of pine needles beneath my feet, the views, and the endorphin-inspired high that fills me with satisfaction. Paddle boarding year round—sometimes in temperatures as cold as 13 degrees—also helps with my fitness. When I sent my Mass General oncologist a photo of me paddle boarding in front of an ice cave, her response was, "Your biggest problem isn't lung cancer; it's that you're crazy!" We can get our endorphin-releasing exercise from runs on city streets or on a machine, but whenever available, the most natural space around is the one I choose.

When we are unable to access the natural world, but can move freely inside our homes, we can keep ourselves in better shape if we stand as much as we can, walk around our interior space frequently, use any exercise machines we have, follow exercise classes online, and regularly go up and down any stairs in our homes. If you don't have an elevating computer table, pile up some books to put your computer on and stand to use your machine. Insert some stretching exercises when you can.

Stretches for Health and Fitness

Q: Do you include stretching in your exercise routine?

When we consider pro-active approaches to health care, proper stretching is near the top of the list. It can help us relax, avoid injury, strengthen our backs, and return to a fit level.

Q: When have you had the need for stretching exercises?

Most of us know what it is like to have a sore back, muscle strain, or post-surgery discomfort. A downhill skiing injury sent me into recovery mode for eight weeks and set me up for several more exacerbations precipitated by events ranging from reaching for a garden plant to squatting for two hours while cleaning our attic. Each time, the exercises that follow helped me to strengthen, with the help of a wonderful chiropractor and orthopedist. The greatest salvation came several years ago when I began standup paddle boarding. As it brings every part of your body into a fit state, one of the greatest benefits is to your back. It has now been five years since I have had a twinge. Please resist the temptation to race through your exercises. Instead, make this some of your quiet time. You can even integrate some of your visualization and relaxation techniques while you are stretching. Keep your breathing slow and easy. Don't hold your breath or bounce up and down while stretching. Stretch only until you feel mild tension and relax as you hold the stretch for 10 to 30 seconds, silently counting the stretch time. These strengthening exercises are appropriate as a part of your lifetime fitness plan, as well as prior to and following surgery. Begin the exercises at the level that feels appropriate and that your doctor approves. Gradually increase them to repetitions of ten or more.

If you are recovering from surgery, check in with your physician and gradually begin your exercises again, keeping in mind that you should not push yourself too fast. Assist your body in the recovery process by performing four to eight repetitions of the first six exercises twice a day. Do not strain yourself or increase the number of repetitions more often than once a week. Add the other routines as you feel more comfortable, increasing repetitions of all exercises as you return to full health. Before beginning any exercise program, check with your physician and use his/her suggested number of repetitions.

A Sampling of Stretching Exercises

Exercise 1

Stand in a split-foot position, with both feet pointing straight forward. Tighten your abdominal muscles and push your hips forward. Hold each stretch for three deep breaths. Repeat frequently.

Exercise 2

Stand with feet 1' apart, arms parallel to the floor. Keeping arms in this position, reach toward the left side of the body with both arms. Toe in with the right foot to release knee pressure. Reverse.

Exercise 3

Stand with feet 1' apart, arms at sides. With palms up, raise arms as high as possible. With palms down, slowly lower arms. Repeat.

Exercise 4

Stand with feet 1' apart, arms stretched out from sides at shoulder height. With left arm, reach as high as possible over head while looking at extended right arm. Return arms to starting position and reverse.

Exercise 5

Stand with feet 1' apart, arms flexed at shoulder height. Keeping elbows at shoulder height, gently pull both elbows back, hold, then return to original position.

Exercise 6

Lying flat on the floor, press back to floor while pulling right knee to chest and straightening left leg. Hold 5 seconds. Relax and repeat. Repeat with opposite leg.

Stretching: Use stretching exercises regularly to reduce stress and keep your body fit.

Calories Burned (based on 130 pound woman)

Activity Calories Burned per Hour

Running (9 minute mile)	684
Stand-up paddleboarding (aerobic level)	600
Swimming a slow crawl	456
Hiking up hill	426
Cross-country skiing	420
Tennis	384
Weight training	330
Golf	300
Walking at a normal pace	282
Weeding the garden	252
Biking at 5.5 mph	228
Cleaning	222

Exercise: Inside, outside, wherever you are-move as much as is comfortable for you.

THE LAUGHTER AND HAPPINESS PRESCRIPTION

"Laughter is a form of internal jogging." Lee Berk, DrPH, Linda Loma University

Direct encounters with nature can bring us much laughter, as can videos of kids and animals, a good joke, cartoons, and so many other experiences. Numerous studies show that smiling promotes the release of mood-enhancing endorphins within our brains. As French novelist and playwright Victor Hugo once said, "Laughter is the sun that drives winter from the human face." Back in the early 2000's there was an explosion of research related to happiness, optimism, and laughter. At this point in time, that seems to be happening again. We can always use a good laugh. As I write this, I glance at my screen to discover that spellcheck has corrected the word "happiness" in my writing to "hairiness." That was enough to stimulate a laugh. Did you just hear my laughter as it lowered the release of cortisol, the primary stress hormone? Have you been laughing or smiling in the last few minutes too? If not, here is a story for you.

Running on the streets of South Florida can get one outside safely, as long as you pay attention. My mind drifts away, as I become caught up in thoughts and mentally transport myself to another place.

Racing along, I suddenly register that there is something going on up ahead on the sidewalk. An army of orange-helmeted workmen, draped over pick axes and shovels, greets me enthusiastically with cat calls and whistles. Smugly, I note that I am probably older than their mothers and vainly revel in this thought. Noticing their three-foot wide trench just in time, I leap over it, hearing their Latino chorus as I hit mid-air. Landing on the other side of the marked work area, my feet hit mush, and I am sucked rapidly downward into thick, slimy mud. Before I can react, those South Florida Spanish voices are around me, the brawny arms of their owners grabbing at me and scooping me out of the muck. A high pressure hose hits me full force, the hands of many men scrub my body, and I detect the word "cement" as my rescuers attempt to clean me off. I have plunged feet-first into a manhole that has been filled with fresh cement.

Thanking my new-found friends, and laughing somewhat hysterically at the level of intimacy that we have established, I slog back to my daughter, Bethany's, feeling a bit disappointed that the cat calls were a warning, not a compliment. Sopping wet from the top of my head down to the sidewalk, I ring her bell and present myself in my cement shoes. "Now what have you done?" she asks.

Q: How about making a list of some times when you have had a good laugh? What about laughter's close ally, happiness?

Q: Are you happy a good bit of the time? Would you like to find some ways to bring more happiness into your life?

Research by the deans of happiness research, Martin Seligman, Ph.D., and Edward Deiner, Ph.D., found that the most prominent characteristic shared by those with the lowest levels of

depression and the highest levels of happiness were their "strong ties to friends and family and commitment to spending time with them."⁷

The Satisfaction with Life Scale

To evaluate levels of happiness, Deiner, Emmons, Larsen, and Griffin developed a five question survey that is now internationally employed, *The Satisfaction with Life Scale*.8

Use a seven (strongly agree) to a one (strongly disagree) rating:

- 7—strongly agree
- 6-agree
- 5—slightly agree
- 4—neither agree nor disagree
- 3—slightly disagree
- 2—disagree
- 1-strongly disagree

Use the 7 to 1 rating of your level of agreement with these five questions:

- In most ways my life is close to my ideal.
- The conditions of my life are excellent.
- I am satisfied with my life.
- So far I have gotten the important things I want in life.
- _____If I could live my life over, I would change almost nothing.

Compute a total score.

- 31-35: You are extremely satisfied with your life.
- 26-30: Very satisfied.
- 21-25: Slightly satisfied.
- 20 is the neutral point.
- 15-19: Slightly dissatisfied.
- 10-14: Dissatisfied.
- 5-9: Extremely dissatisfied.

Q: What is something that really made you laugh?

Seligman found that of three components of happiness—pleasure (pursuit of pleasure); engagement (the depth of engagement with one's work, family, hobbies, and romance); and meaning (using personal strength to serve some larger end), with engagement and meaning much more consequential than pleasure. Seligman, researcher Sonja Lyubomirsky, Ph.D.,⁸⁹ and psychologist Dr. Robert Emmons⁹⁰ also learned in separate studies that the most effective ways to boost happiness are to express gratitude to others; to perform acts of kindness; to be aware of your blessings by writing down three positive experiences each day; to identify your strengths and find ways to use them; to practice forgiveness; to spend time with friends and family; to care for your body; to learn approaches to dealing with stress and hardships. This good advice can be taken a step further if we establish a self-fulfilling prophecy each morning: This day will hold goodness. I will be grateful for even small good things. And, I will do at least one good thing for someone or something else.

Q: Can you assemble a list of resources of scenes and stories that will give you a good laugh or go online to watch some funny videos?

We might find ourselves in circumstances where they won't take away unpleasantness forever, but they can give us a break and a release of tension. Research has demonstrated that those who enjoy humor report being less lonely, less stressed, and less anxious than those who don't joke. A happy attitude, or optimism, was found to correlate with longevity.91

Credit for boosting happiness has been given to the world and its creatures for quite some time. A report generated by Frederick Law Omsted in 1865 related to the status of Yosemite stated that reinvigoration from nature "not only gives pleasure for the time being but increases the subsequent capacity for happiness and the means of securing happiness." We also know that positive feelings correlate with levels of exercise on a daily basis, particularly in the green outdoors; that our feelings can be affected by what we put into our bodies; that we do better when we have positive relationships; that relaxation and visualization can impact levels of positive feelings; that volunteer experiences lead to a greater degree of life satisfaction; and that "a core set of beliefs that are not easily shattered"¹⁰ can help us to be more resilient. The recipe for happiness and laughter is consistent with those for the other goals we are addressing.

Q: Can you insert the laughter and happiness concept into your feelings about aging and eventual death?

"Having a positive view of aging can have a beneficial influence on health outcomes and longevity,"12 according to a study of 4,000 people age 50+ published in 2016 in the Journal of Gerontology. Researcher Dr. Becca Levy also stated, "Psychologically, a positive view can enhance belief in one's abilities, decrease perceived stress and foster healthful behaviors. Physiologically, people with positive views of aging had lower levels of C-reactive protein, a marker of stress-related inflammation associated with heart disease and other illnesses, even after accounting for possible influences like age, health status, sex, race, and education, than those with a negative outlook. They also lived significantly longer."12 Personally, I take these words as very encouraging. I am far from an expert in many of the subjects in which I engage, but I have two great secrets. First is the fact that my relationships include many remarkable individuals who are experts in multitudinous fields. They, who have taught me so much, are a resource to which I turn when I am seeking wisdom. There is one spot, however, where I am quite confident that I am in the top 1%. That is in aging happily and in my boundless appreciation for life and the world around me-the root of our shared journey. Thank you, God and the Universe, for giving me this second secret as well as so many experiences--the uplifting as well as the challenging—and for helping me to pass the benefit of my journey on to others.

Laughter: Laugh at yourself; send happiness and humor to someone else.

BUILDING RELATIONSHIPS/MAINTAINING A SUPPORT SYSTEM

"Remember to hold hands and cherish the moment, for someday that person will not be there. Give time to love, give time to speak, and give time to share the precious thoughts in your mind." George Carlin, comedian, 2004.

Asked by Thomas Friedman what is the biggest current disease in America, former Surgeon General Murphy replied, "It's not cancer. It's not heart disease. It's isolation. It is the pronounced isolation that so many people are experiencing that is the great pathology of our lives today."⁵ A generational study by Cigna in 2018 concluded that each generation is more socially isolated. Increased engagement with technology is a prime suspect. The strength, comfort, and joy that come from strong ties to family and friends can make a huge difference to all that we experience. Reams of research tell us that those with strong family ties live longer, that those who have close sibling relationships have fewer symptoms of depression, and that couples fare better than those who are on their own. A 2017 study for the American Psychological Association by Julianne Holt-Lunstad demonstrated that greater social connection can reduce the chance of early death by 50%. We know that taking the time to share our feelings with others can help us to move through a difficult period. Sometimes, however, it is really hard to take that step regardless of how close we might feel to our loved ones.

Q: To whom are you closest? List more than one, if you want.

In the same way that you are in the decision-making seat each day of your life, you are the most important part of your own treatment team when you are facing a challenging period. Through including your family members, friends, pets, medical professionals, and others in your support system, you can create a very powerful team that can mobilize many resources to help you to combat the presenting challenge and bring you to a healthier place.

Q: If you were faced with a crisis or needed to bounce an idea off someone right now, who would it be?

Q: How about making a list of several people with whom you would feel comfortable sharing your feelings? In the best of situations, family and friends are critical to human health, but as we age and when we face challenges, they are even more important. It can be interesting to consider whether those you would call to share a hike or a movie are the same people you would call on when you are scared or lonely.

Let's begin by thinking about those who make up our support system and the elements in our lives that represent positive engagements. We can do this together, as we include all of the people and other entities that are important to us. In addition to family and friends, I am going to add Acadia National Park, Virgin Islands National Park, the waters, and other green spaces; my bike; my spiritual support system; my thinking mind; my running and hiking legs, and the rest of my body; my paddle boards, skiis and boats; our home; my volunteer efforts at MCHT, Friends of Acadia, and Friends of Katahdin Woods and Waters; the birds and other creatures; my memories, imagination, and creativity; our cat; my gardens; my indoor green space and plants. You get the idea. Go for it.

All of the support system that we generate is available at every turn as we grow, and change, and age. Some elements come and go in their level of importance, and some people drift in and out of our lives. We lose some from this world but connect with them spiritually, and they help us in other ways. This entire system is miraculous and holds great promise for us in all of our life encounters.

Now let's look at how we react when faced with a crisis. Building a support team can be a very important part of strengthening one's role in the intervention. Most of us have experienced the anxiety related to waiting for test results or life-altering information. We are suspended in limbo until the reports come in. It is a dreadful time, when a sense of things being out of our control is at its highest. We pray, beg, and plead for everything to be fine. We agonize over all the possibilities, envisioning the prospects for what lies ahead, given different scenarios. We promise that, if our loved one's or our own situation is a good one, we will lead cleaner lives, be nicer to the world and everyone in it, appreciate every day...whatever it takes, just as long as we hear the "no" rather than the "yes."

And then, when the call comes, life hangs by a thread while the results are delivered. That power which my doctors held felt so familiar throughout my twenties when I had a series of biopsies for breast lumps. The anxiety has reappeared over the years many times as I have sat waiting, most recently in January of 2019, when I received a diagnosis no one wants.

Q: Have you felt this way, too? It seems that the receipt of final results always involves a weekend, so that the agony is extended. In a few seconds, what is reported on that call can mean that life can return to normal, or that it is thrown into a state of complete turmoil.

Our physicians and their medical support personnel are obviously critical to our treatment. It is not necessary, however, to turn over complete control to them or to make them larger than life. They are an important part of a team that we can create in order to empower ourselves throughout the treatment process. We want that team to be so forceful that it creates a strong and effective combat squad that can, hopefully, wipe out the ailment and restore us to full health.

Q: Who is on your team?

If we include all of the medical specialists who are involved during the treatment of any cancer case, for instance, the numbers are large. When I reflect on the first day that my daughter, Melissa, visited Dana Farber Cancer Institute, I can count at least thirty people who directly participated in her case, including her extraordinary oncologist, Dr. Eric Winer. Every one of them treated her like they had known her for years. Over the three years of her treatment and another ten of complications and follow-up, there were dozens more. If we consider each of those individuals a part of her treatment team, that is a very significant start in building a support system. Building upon the medical staff, if we include all of the treatments that modern medicine and mind/body approaches offered Melissa, another dimension of the team materializes. We can't forget all of those people who may not be in her inner circle, but who regularly express their caring and support.

Then, of course, there are those from Melissa's innermost circle: the friends and family members who are closest to her. Now, let's add Melissa's positive engagements at the time of her medical crisis and all of the activities that are important to her. This is such a powerful, supportive, and nurturing team that it offers great strength in assisting with any present or future crisis.

Q: How can you create an illustration of your team (your Circle of Care)?

Now let's return to your list of your support network of family, friends, activities, etc. Add anything you left out. Now draw a circle and put your very closest companions, loved ones, and positive activities in it. Then draw an outer circle and put the next tier of friends, family, and engagements within that. Then go one or two more circles out, placing more names of people, equipment, pets, and engagements. You can expand out as far as you choose.

Q: How does your team look?

Relationships: Create your Circle of Care; reach out to and thank those in it; add someone new. Connect, connect.

KEEPING YOUR SPIRITUALITY TURNED ON

We all have deeply personal ways of expressing our spirituality. Whatever works for you, in whatever religion or manner of spiritual expression it manifests itself, is the route to follow. Personal healing and life direction can be significantly impacted by the quality of our engagement with a higher power. More than ten years ago, research demonstrated that cardiac patients were less likely to die when specified caring individuals prayed for them, despite the fact that the patients were unaware of the experiment. Science also tells us that those who consider themselves to be religious live longer than those who don't, and that praying lowers blood pressure. The relaxed state induced by prayer resembles other meditative states that have been documented as lowering blood pressure, reducing pain, and alleviating insomnia.

It feels important to share with you the fact that I pray repeatedly throughout the day and night. My thankfulness prayer spills forth frequently whether I am running, waking in the night, paddle boarding, gardening, driving, or doing one of a thousand other things. Here is an abbreviated version that removes much of the personal:

Thank you for the sky, the universe, the planets, the sun, the moon, the stars, the earth, the clouds, and thank you for the air that we breathe, the healing air that we breathe. Thank you for the sunshine, the rain, the snow, the sleet, the hail, and the breezes. Thank you for the creatures of the sky—the birds, the bees, the butterflies, the moths, the bats, the insects, and all the other creatures of the sky. I will do the best that I can to help to care for your world and your creatures.

Thank you for your earth and for your soil. Thank you for the geological features. Thank you for the things you grow on the earth and in the soil. Thank you for the trees and the shrub; the flowers and the plants; the weeds and the grasses; the lichens and the mosses; the fruits, and the berries, and the vegetables, and all the other things that you grow on your earth and in your soil. I will do the best I can to help to care for your world and your creatures. Thank you for your creatures, the worms, the insects, and all the other creatures of your earth and of your soil. I will do the best that I can to help to care for your world and your creatures.

Thank you for your waters, fresh and salt. Thank you for the lakes and the ponds; the rivers and the streams; the bogs and the brooks; the creeks and the marshes; the swamps, the estuaries, and the salt ponds, and thank you for the oceans wide that bind us all together.

Thank you for the **creatures of your waters, fresh and salt**. Thank you for the **birds**, the **mammals**, the **reptiles**, the **amphibians**, the **fishes**, the **worms**, the **crustaceans**, the **insects**, and all the other creatures of your waters, fresh and salt. I will do the best that I can to help to care for your world and your creatures.

Thank you for my **family** and for my **friends**. Thank you for strengthening them and caring for them physically, emotionally, and spiritually, and for helping them to do the best that they can to help to care for your world and your creatures. I will do the best that I can to help to care for each of them. (I include all family members individually and friends as a group.) Thank you for giving me so much more than I ever expected—so much more access to your world and your creatures; so many more opportunities to work on behalf of your world and your creature;, so many more family members and friends who have left us, and who are now my spiritual advisors. Thank you for guiding my voice, my words, my thoughts, my actions, my speaking, my writing, and my direction. Thank you for guiding my life at every turn, and helping me to do the very best that I can to help to care for your world and your creatures.

Q: Do you have your own thankfulness prayer? You can use yours or mine for the next exercise.

Please write down all of the words in bold type, and next to them write the first image that comes to mind for each word. Then, practice visualizing each image in as much detail as possible. Sometimes you might be interested to find yourself getting an image of a creature, place, plant, or person from another time in your life. When I closed my eyes a few minutes ago, an image came to me of my little black Booby Rabbit—a pet named when I was nine years old and did not know why everyone laughed at his name. Sixty one years later, Booby came to me in great detail in my mind's eye. I could feel him sitting in my child's lap as I stroked his ears, and I could vividly recall the scent of the grain that he ate. I remember how important that bunny was at a time when I did not feel safe in the world, each day questioning my mortality. He helped keep me in the present. As you move through the bold-typed words, perhaps interesting images and feelings will come to you as well.

Q: What images and feelings did you experience?

Sprituality: Give thanks; send healing light and love to all in this world; ask for forgiveness and help for all—right now and many times each day.

ACCEPTING MIRACLES

We have all had inexplicable experiences that astound us. I offer you a few of mine, as an impetus to recall yours.

About twenty years ago, an unusual experience related to impending crisis rose out of my sleep and served as the catalyst to write *Moving Past Cancer*, a book that I later set aside when my daughter developed cancer.

My husband, Ben, and I lie sleeping in a remote anchorage, on the island-studded coast of Maine. I wake suddenly to full alertness, brought on by the intense pain that has troubled my stomach day after day for months. After a lifetime of eluding the cancer that first struck me as an infant, I am prepared for the worst. No medical advice has been sought—quite unlike me—as I am so convinced that this is bad. Soaked in sweat and doubled up in pain, I promise that I will do my best, regardless of the hand that is dealt. Ben snores quietly beside me, unaware of my unshared fears. I feel a deep sadness at the thought that my time has likely come, and that I will need to leave cherished family and friends behind. Some solace comes from the promise of seeing those who earlier left this life. Then, out of the darkness, a palpable presence begins to fill our boat's aft cabin. Like a soft and feathery nest, I feel it all around me, soothing my senses, easing away tension, sinking deep into every fiber of my being. A strong message penetrates all. "Your time has not yet come. You have much to do here. Give back for what you are given." I drift off to the gentle lapping of the waves against the boat's hull, feeling peaceful and in love with the world. In the morning, I am refreshed and pain-free for the first time in many months. The pain does not return—not that day nor any day after. In thanks, I make a pledge to do all that I can to provide hope and inspiration to others, while acting on behalf of the natural world, through sharing the things that I know intimately."

Years later, in January of 2019, I again feel a powerful presence during a lung biopsy at Massachusetts General Hospital. That biopsy provided confirmation that I had the EGFR mutation which could be treated with targeted therapy—a game changer. I share that with you now.

A warm, inviting smile spreads across Dr. Subba Digamurthy's face, his resident close behind. "I am a light-weight when it comes to anesthesia," I inform them, "due to a long history of using clinical hypnosis for my own patients and myself. Please give me just a little anesthesia, and watch how deep I can go, while still remaining fully alert." (I hope I sound intriguing and not like a know-it-all.)

"Sounds good," says Subba. "You also need to know that you are at high risk for air entering your lungs at the incision site and causing lung collapse. We aren't sure what happens when there are more than fifty nodules in each lung. We can deal with it, but it might mean a night at MGH."

Massachusetts General Hospital is as good as it gets, and I am not worried. Rarely do I meet anyone who is not amazing. Only once has anyone treated me badly, and I will forgive her for that. Before me and around me, are several more medical professionals who qualify for the amazing category. "So..., if you think about the best possible outcome for this lung biopsy, what would you like to see?" I query.

"The hole from the long needle needs to close quickly, so that no air can get in," he says.

I envision the long hollow needle into which another needle will be inserted to remove a test sample and several research samples from the largest mass in my upper right lung. "Okay, we'll do it," I answer. A bit later, I slide onto the table, wiggle around to get comfortable, and begin to relax. I feel myself dropping way down deep, and I am prepared to follow the gray angel fish of my favorite visualization to go deeper still. Instead, I feel and see a shimmering golden light pouring into my body. This is coming from somewhere else, much like the golden hands that I felt and saw at work last night on the many nodules in each of my lungs. I hear all that Subba is saying, and I feel a wide smile spreading across my face. The golden light is pulsating, bringing with it healing and the sense of a great journey where I can be helpful. It spreads a blanket of golden light over the surface of the nodules and, instead of eradicating them, begins to transform them into a normal, healthy surface. Subba speaks, "The needle is going in." I feel no discomfort or apprehension, instead welcoming the needle as part of my treatment team. Subba has told me that I will hear something like a stapler each time a sample is taken. Suddenly, there is a stream of healing, shimmering golden light flowing though the hollow needle into my body. *I smile wider, knowing that something miraculous is happening. Subba inserts the second needle* that will retrieve the samples through the hollow needle. Every few minutes, I hear the stapling sound. I am so happy that I have given permission to take these extra research samples, as I know of the cutting-edge research that MGH is doing. All my life, I have wanted to make a difference to the natural world and her creatures—to give back for the life that I have been given—and this feels like something huge. I am grinning from ear to ear, and I want to tell someone about this. Subba says somewhat sternly, "Remember not to move!" I know that I am not meant to move throughout the procedure and for three hours afterward. This has been my biggest worry. I am just coming off the cold of the century. My body has been fraught with violent coughing fits that included more upchucking of mucous than I ever imagined possible. In the throes of a lung cancer diagnosis and related tests for the past ten days, I felt like I was dving from either that ailment or the common cold. It was hard to tell which. A dose of cough syrup seems to be quelling the cough now, and the shimmering, golden light continues to course throughout my body. I am completely relaxed and happy, pleased to be having this lung biopsy, and feeling like I am doing what I am meant to do at this point in time. As I drift along, I hear that the procedure has been completed, and I am moving to the recovery room. Over the next three hours, I lie face-down and forbidden to speak, focusing on the incision hole closing neatly. Nurses check on me regularly, I have three chest x-rays, and I am tired of not moving. Eventually, Subba and his resident, Dr. Justin Stowell, return to turn me over. Greeted by two wonderful smiles, I hear, "You were awesome. That was amazing. You were so deeply relaxed, and you heard everything, didn't you? The incision hole has closed nicely."

The shimmering golden light greets me everywhere. From my Liberty Hotel room post-biopsy, I am astounded to see the sunburst of light reflected on a tall Boston building. At home, the stunning light ball explodes from the snow and ocean outside the window. Sunbursts of gold pour forth everywhere—through art and real nature. I incorporate them into visualizations for others, and I make shimmering golden eggs for the Garland of Hope that I am constructing.



Nearly a year after that biopsy, Dr.Tavis Taylor referenced sunbursts of healing, loving light in imagery he gave to me. Today, I reflect on one of many remarkable experiences born of this ailment. Traveling to Ann Arbor in November 2019, I met Tavis Taylor, M.D.—a physician, spiritual healer, and healing light worker who has assisted others facing challenges. We connected circuitously through a new friend whose spontaneous recovery from a dire diagnosis piqued my curiosity. Could this man offer me an additional way to help others? I expected no cure myself, and quickly told him that my hope was that targeted therapy would keep me in this world as long as I could be useful. That has been my mantra, along with appreciation for the silver linings that have come with this situation—increased opportunites to assist the world through using my cancer as a model, contact with an incredible medical community and friends new and old, much time with family, and more.

Tavis commented that he sensed that I was accepting having cancer, as long as I felt well and could be active. We discussed the many silver linings to my cancer, including my sense that it gave me increased opportunity to help others through my speaking and writing. He then asked me how I saw myself in the best possible light, months down the road. "In targeted therapy, continuing to derive benefits, still running up mountains," I replied.

"Can you see yourself cancer free? Can you let the cancer go, acknowledging that the work you are doing with others can continue successfully?"

"I can do that," my mind's eye and I responded, "but I had not seen that before."

I closed my eyes and opened my palms to accept assistance. In my mind's eye, I watched the healing, shimmering golden and purplish light pour into my body through the top of my head and felt it pour through me as I breathed deeply, sending out sunburst light and love until I glowed like the sun. With everything light and glowing, this energy focused on areas I wanted to heal. I spoke to the light and the love and the places needing healing, gave them my love, and shared images of healing and a healthy self. An image appeared of a widely smiling me racing my bike along the carriage roads of Acadia National Park, hair streaming in the breeze. I glowed with good health and happiness. This sense of wellness and healing reminded me of the powerful presence of a shimmering golden healing light during the lung biopsy at Massachusetts General Hospital. Tavis cannot have known of that. Coincidence or kharma?

Q: When have you felt miracles at work in your life?

Accepting Miracles: Look to the shimmering, golden, healing light; send love and light to all.

JOURNALING

Did you know that those who write about distressing events have stronger immune systems and visit their doctors about half as much as those who write only about trivial events? In the mid-90's, researchers at Southern Methodist University found that journaling has these physical benefits as well as the more frequently documented emotional benefits of relieving stress and depression. Earlier, we focused on writing about concerns as one antidote for sleep difficulties that swirl around worries. The more you write to express your feelings, the easier it will become, and the more impact it will have. In the process of repetitive writing, our writing becomes better too.

Writing out your thoughts does help to release them. It also helps you to build upon them. Putting something in writing does not mean that you are wedded to it or need to keep it. Generating written material is sometimes difficult because, like any form of art, writing is a statement about oneself, and it can be very hard to take the step of opening that self up to criticism. Let's think about that in a different way. We don't need to share our writing with others, if we don't choose to. When we open ourselves up and do release our writing to others, it is very similar to sharing ourselves in other ways. In making that intimate gesture, we are also giving others permission to take a risk with us, thus granting one another an opportunity to bond in the relationship. Your writing can lead you in this direction. Or, you can use it for selfexpression and venting, and then just keep it for yourself.

Q: Can you lessen the stress of a worry by writing about it for a few minutes right now?

Q: The next time you are anxious or depressed, how about writing your thoughts?

Q: How did you feel after either of the above writing experiences?

Now, I share with you a beautifully worded poem with a special message.

This Poem Should be a Circle Mark Nepo

I wish you the ability to breathe after pain, to begin again, though nothing else seems possible.

I wish you resilience: to part like the ocean and accept like the sky, to be held like a root.

I wish you survival: to take in life like a trapped miner finding an airhole and praising it as God.

I wish you courage to ask of

everything you meet, "What bridge are we?"

I wish you chances to listen: to all that holds us up.

I wish you the-kindness-that-you-are coming to brighten your face like orange leaves scattered at the end of fall.

I wish you endless journey that seldom appears as we imagine.

I wish you curiosity: to make a boat of wonder and an oar of gratitude.

Journaling: Write a loving message to someone else; write one to yourself, too! Pass love forward.

TAPPING YOUR CREATIVITY

Creative expression, in its many forms, is well-documented as impactful in the psychological and physiological healing process. During challenging times, ranging from personal medical crisis to world turmoil, opportunities to engage in viewed, guided, and independent artistic endeavors can help to alleviate depression, physical discomfort, and anxiety.

The health benefits of the arts, including music, visual arts, and other forms of creative expression, reveal "evidence that art-based interventions are effective in reducing adverse physiological and psychological outcomes."¹⁰⁶ Furthermore, "creative engagement harbors the potential to assist in the reduction of stress, anxiety, and depression related to any external stressor. The positive impact of viewed artistic forms also has considerable merit."¹⁰⁷

Music's soothing capacity is a much-researched element that has been shown to calm neural brain activity₁₀₆, thus reducing anxiety₁₀₉ and restoring emotional balance.₁₀₈

Q: What music would you say helps you to feel calmer and less anxious?

Guided painting opportunities and other art activities have been documented as helping to alleviate depression, anxiety, and fatigue.¹⁰⁹

Q: How would you describe your engagement with any sort of independent or guided art activities?

Q: What new art forms would you like to pursue?

Q: When can you do that, and what do you need to get started?

Viewing the creative endeavors of others, whether in film, theater, dance, or other modalities has also been demonstrated to positively impact mood and other psychological conditions, as well as having a "salient impact on important physiological parameters."¹⁰⁶

Q: What is your personal experience with film, theater, dance, or related modalities?

Q: How do you feel after viewing others' creative endeavors?

We all have ways of expressing ourselves creatively, despite the fact that we might not produce paintings, play an instrument, or sculpt.

Q: What is the most creative thing you do?

Although I do not consider myself to be particularly artistic, I have the good fortune of having many talented friends, and I come from a family of amazing artists. My grandmother was a well respected Washington sculptor, my mother has many talents, and my daughters' endeavors range from painting to jewelry design and creation. I would love to have their talent or the musical ablility of many friends, but I adjust my thinking and acknowledge that my creative expression manifests itself in my gardens, where I love to produce an explosion of life, color, and joy.

After writing this, I am heading for my office to get out the watercolors that remain in their original packaging. With trepidation, I will try them out. How about joining me in a new creative adventure? Next, I share the tale of a creation during a time when my health future looked bleak. Perhaps you would like to make a Garland of Hope of your own.

Building a Garland of Hope

December 2018 is filled with family, holiday gatherings, shining lights, and the uncertainty of a surprising diagnosis. I cough my way through each day, and struggle to climb the ice to the top of Sargent Mountain, where Ben and I are rewarded with sightings of thirteen snowy owls.

The cold of the century appears, and I feel housebound. Frigid, howling wind provides no enticing outdoor invitation, so I send Ben off on his own, wondering if this will become the norm. What can I do to feel better, as I await a treatment plan for my never-smoker lung cancer? I know! Let's retain one frame of a Christmas garland and build it into a Garland of Hope that will remain until next year. It will be on the ocean-facing window next to our breakfast table—a place where we sit often, and my eyes can feast upon it. If I survive over the months, it will be decorated with seasonal flowers, dried flora, and greens. If I don't endure, it will be a reminder to my family and friends of all the fun and love we have shared. They tell me they will never forget me, but I want to give them this extra little nudge.

As the days pass, my breath is short, I cough incessantly, and the best I can do outdoors is to paddle board on frigid waters or push myself to walk as fast as I can along Acadia's carriage roads, stopping regularly to indulge in mucousy coughing fits. Gone are mountain climbs and runs. A game changer would be a genetic mutation for which targeted therapy could produce a remission miracle.

An indoor prisoner, I throw myself into volunteer activities on behalf of the natural world, write, entertain, and build the Garland of Hope. I tell everyone of my ailment, knowing that this will assist them in sharing their own difficulties, while also making me and this cancer less scary. I worry that they will avoid me, as so often happens with patients whose aiments terrify others, but I am wrong. Loved ones shower me with attention and invitations. They give me items to add to the stargazer lilies, dried allium and hydrangea that adorn the garland. The lilies remind me of my friend Cody, whom we lost in September 2018 to ALS. Little do I know that, after her death, the scent of stargazers will appear from nowhere, reminding me of her ethereal presence.

Many months later, I am in full remisson thanks to the EGFR mutation and targeted therapy. The Garland of Hope remains, still welcoming stargazer lilies and other special items. It has become such a fixture in our kitchen that I forget that sparkling white lights amidst a garland might pose a question. "Still think it's Christmas?" my tech expert, Wendall, says as he sits down to heal my computer.



Creatvity: Do a project related to a trusted talent; try something new, too!

VIEWING OTHERS' CIRCUMSTANCES

"In the depths of winter I finally found that there was within me an invincible summer." Albert Camus

An amputee runs a marathon. A blind women walks two miles with her dog to her volunteer job teaching calculus to students and reads their texts in Braille. A physician leaves her country, comes to the United States, and goes to medical school all over again before performing life-saving surgeries. How many times have you looked at someone else's life experience and thought, "If he or she did that, I can get through my challenge!"

Although details have been dramatically altered and the name is fictitious, the following case study is illustrative of some of my professional work. It demonstrates how engagement with the natural world and its creatures can be combined with traditional therapy, visualization, relaxation techniques, appropriate diet, exercise, volunteerism, enrichment activities, and support system development to assist us in coping with life's challenges, as well as in living a healthier life in general. Perhaps you will find this case study inspirational and helpful as you address your life needs.

A CASE STUDY

"Just living is not enough...one must have sunshine, freedom, and a little flower." Hans Christian Anderson

Hugh arrived in my office in a high state of anxiety. Recently released from inpatient treatment for Generalized Anxiety Disorder because his insurance ran out, Hugh was in a highly agitated state. Wringing his hands, pacing around the room, and frequently twitching, he reported that he could not control his panic and irritability, that he kept thinking that he was going to die from a heart attack, and that he had lost his job because he could not concentrate or complete assigned tasks. Our intake interview revealed that Hugh had not eaten since the night before and had consumed six cups of coffee before his appointment. His last intake of beverage or food had been coffee and cake at 11 PM. Further inquiry revealed that Hugh typically had twelve to fourteen cups of coffee each day, often accompanied by sweets. He ate hotdogs with cola for lunch and takeout food for dinner in the late afternoon, followed by cola, sweets, and then his pre-bedtime snack of more coffee and sweets. Hugh was approximately 150 pounds overweight. He got no exercise, used no relaxation approaches, was single with no friends and no pets, and said he had little interest in anything other than the technical aspects of computers and watching TV shows. Hugh stated his primary concerns as:

- 1) an inability to control shaking and twitching
- 2) loss of his job
- 3) an inability to concentrate or complete jobs
- 4) fear of dying from a heart attack
- 5) lack of friends because of his irritable and explosive temperament.

It wasn't easy to convince him, but Hugh was eventually able to see the parallels between some of his problems, his sugar consumption, and caffeine toxicity. Because he had undergone a complete physical evaluation before our meeting, his symptoms had been attributed to mental health issues, and he had been declared physically healthy, aside from his obesity. Hugh agreed to begin gradually cutting back on his caffeine and sugar intake. He agreed to begin attending Overeaters Anonymous (OA) to help him develop a healthier diet and a support system. He met with me once a week in an outdoor setting to have a therapy walk and once a week in the office to work on relaxation techniques. After four weeks, he reported forming friendships within his OA group as well as a significant reduction in his anxiety level.

At six weeks, one of his new friends accompanied him to the local animal shelter to pick out a dog. Hugh then began taking daily walks with his dog and began helping out at the shelter, where he was given the volunteer job of dog walking, which he loved. We talked about how caring for a dog could help him to learn to take better care of himself and to transfer the positive way he related to animals to similar interactions with people.

At eight weeks, he was down to two cups of coffee a day and one dessert a day. He used a relaxation tape upon waking and in the late afternoon. All symptoms of an anxiety disorder had vanished: no twitching, no shaking, no heart pounding, less irritation with others, fewer worries about dying of a heart attack, and increased ability to concentrate and complete tasks. Although he was still unemployed, he looked forward to summer when more positions would be available in his community. By mid-summer he had established an active private computer repair business and was regularly seeing friends from the animal shelter and his OA support group. His dog walks were leading him to many parts of the national park, and he had lost 50 pounds. He had given up all sweets and caffeine and was having no trouble with anxiety or its symptoms. At last report, Hugh was leading a fulfilling life and functioning well.

- Q: What lessons can you learn from Hugh's case history?
- Q: Are there ways in which you relate to people in circumstances similar to your own?
- Q: Who do you look to for lessons in life?
- Q: How has that changed how you handle your own life?

Viewing Others' Circumstances: Make a list of lessons learned from others that will help you through this time.

VOLUNTEERING IMPROVES YOUR QUALITY OF LIFE

"To cherish what remains of the Earth and to foster its renewal is our only legitimate hope of

survival." Wendell Berry

In this time of rapid environmental change, as we see creatures disappearing, our land and sea base altered, and the climate itself behaving in a dramatically different manner, there is a way to give nature a hand while also gathering a multitude of personal benefits. A symbiotic relationship works. As stewards of the environment who derive much spiritual, emotional, and physical fulfillment from the world around us, we can also enhance our well-being by reaching outside ourselves and volunteering on behalf of our passions. We can live our lives in a worldnurturing and self-nurturing manner that will prepare us to move through troubled times more easily until we arrive at the next up swing.

Ben and I sat one January day overlooking the turquoise waters of the Virgin Islands with our wise conservationist friend whose family generosity gave roots to this part of the National Park System. In his own right, Larry is dedicated to land conservation, volunteering on behalf of that and other important causes. We talked with him about how each of us can make some kind of a difference in this challenged world. His advice is well worth sharing. "Find your niche," he began. That really sums it up, for your niche and your passion can carry you a very long way as you work to assist an important project. Finding your niche is not so hard if you begin by thinking about what aspect of our world excites you the most and then how your areas of expertise and interest can be of benefit to a particular cause.

Q: Can you reflect on some focus areas that inspire your passion?

Here is an example of one that inspired us. The Cornell Lab's magazine, *Living Bird*, and its partner, *Northern Woodlands*, suggest some things you can do quickly to assist birds: keep your birdfeeders clean to prevent disease; plant native plants; and keep your cats indoors. Great Backyard Bird Count(birdcount.org) helps researchers at National Audubon Society and Cornell Lab of Ornithology through citizen scientist observations of birds, and Project Feeder Watch engages volunteers to count birds at their feeders over the winter. What an incentive this is to study and help the avian population, even when we are unable to get outdoors.

If your thoughts turn to volunteering on behalf of our parks, conserved spaces, and the environment, you will find yourself useful regardless of the number of hours you can spare each week. And, your energy level can find a fit. From doing citizen science research to making phone calls to calling donor prospects, from stamping envelopes to shoveling snow—there is a job for you. You are guaranteed to feel that you have made a difference each time you put your time and energy to work. Where do you think that you can make a difference?

Q: What is your skill set?

Q: What are the kinds of activities where you can assist and make a difference?

If you know of nonprofits that cater to your interests, make note of them or check out the Internet. Then think about what you would like to do for them if you could choose. Each of us has a skill set that can be very helpful to the causes we care about. Depending upon what else is going on in our lives, we may elect to engage deeply at some times and only a few hours a month at other times. The nonprofits that you approach might ask you to help them in ways that you had not considered, opening up a new adventure for you. Most nonprofits are enthusiastic about donated expertise and energy. Particularly during challenging times, what we give of ourselves to others can help us to feel better about our own life circumstances.

Volunteerism can enrich your life experience. In a fraction of a second, all can change. So, lend a helping hand, clean the roadside, make the call, or write the check: your opportunity is now. Separately, we define our passions and where we want to invest our time. Then, we seek out those who are like-minded. The passion of the individual and the power of the group *can* make the difference. As you take the challenge, improve your own well-being, and rejoice in your good fortune at being a part of this place at this point in time, instill in your heirs the spirit of giving back through creative energy, time, and dollars. Their own lives and the world will be richer for it.

Your opportunity to help someone else is now.

- Q: Is there something you can offer to do for someone in need?
- Q: How about making a list of people you can phone who are alone or struggling?
- Q: Can you email or phone that person today?
- Q: How about creating an uplifting group email or social media post?

You can also immediately help with some critical issues related to our natural world. We are in a period of eco anxiety that relates to our observations of change, ranging from new pests in our gardens to rising sea levels and more frequent storms.

There are so many valuable experiences out there just waiting for you. Once again, I cannot stress strongly enough how the engagement with others who need some help—whether people or causes—can bring you out of yourself to the point where you are deriving great benefit as well. Things just don't seem as overwhelming or hopeless in your own life when you can see that you are having some positive impact in the world.

Q: How can you employ your passion?

You likely have already conjured up many prospective places where your volunteer efforts could be of great use. If not, I am going to give you a few ideas that are specific to helping the natural world and her creatures. They are found later in this document.

Focus on your passion and do one thing each day on its behalf. Reach out to others whose circumstances are challenging. Call or email one of them right now and each day.

You likely have already conjured up many prospective places where your volunteer efforts could be of great use. If not, later in this document, I am going to give you a few ideas that are specific to helping the natural world and her creatures. Thank you for all that you are doing to assist the world and her creatures. I send you shimmering, golden healing light and a favorite peaceful scene from the Isle au Haut District of Acadia National Park.



GO DEEP WITHIN THE DETAIL. FIND PEACE AND HEALING. xxoo *Dianna*

A Sampling of Ways that You Can Help the Natural World and Her Creatures

Help with Ecological Mismatch and Climate Change Issues

 Educate yourself or engage in a citizen science group where you can learn how native and invasive plant species disperse fruit and how birds, insects, and plant life cycles are changing.
 Study the interaction of birds, insects, and plants.

2) Study the interaction of birds, insects, and plants.

3) Visit specific locations each day to observe and record the presence and abundance of flowers, fruits, birds, and insects.

4) Plant perennial and annual milkweeds to restore the food source of the monarch butterfly. Contact the Xerces Society⁵⁷ for further information.

5) Record information about and photograph birds and invertebrates eating flowers or fruits in those locations to provide evidence for study.

Help Eradicate Invasive Species

1) Become familiar with the invasive plants of your region.

2) Object to the sale of invasive plants if you see them in nurseries. At home and in your community, replace invasive plants with noninvasive plants and shrubs that attract wildlife.

3) Do not allow invasive plants to flower, and eradicate them by digging out the plants or covering them for an extended period, bagging and destroying any refuse.

4) Plant native species.

5) Volunteer for or organize community eradication efforts.

6) Assist in educating others. Inquire about local planting efforts; become engaged so that you can influence plantings.

Assist the Pollinators

1) Become familiar with the pollinators of your region and help to educate others regarding the threats to pollinators.

2) Plant gardens friendly to bees and other pollinators.

3) Provide pesticide-free water sources, use no pesticides, and remember that pesticides and pollinators do not mix.

4) Boycott stores that sell treated plants.

5) Pass on these words from the Xerces Society for Invertebrate Conservation's website about neonicotinoids (insecticides that can kill bees) and bear in mind the fact that:

"Neonicotinoids are found throughout the landscape in areas where they were not directly applied. Here are three ways neonicotinoids interact with the environment and can impact invertebrates:

Plant Uptake: Plants take up neonicotinoids, spreading the chemical through plant tissues, potentially exposing insects that contact pollen, nectar, or other plant tissue.

Dust from Coated Seed: Neonicotinoids are released in dust from coated seeds during mechanized planting. This dust can move off-site, exposing bees or contaminating non-target sites.

Persistence: Most neonicotinoids are long-lived, persisting for months to years after an application. Shrubs and trees may remain harmful, and residues in soil can be taken up by new plants."

6) Allow dandelions and clovers to grow in yards, keep meadows with wildflowers mowed every 1-2 years, and keep edges with brambles such as wild blackberry for bee nesting.

- 7) Avoid hybrid garden plants that do not provide pollen and nectar.
- 8) Encourage attention to climate change issues.

As climate change increasingly allows the winter survival of annual exotics, numerous invasive plants are threatening native vegetation. Unwittingly, businesses and individuals have transported invasive plants for landscaping and garden specimens. Many of the shrubby species produce fruits that are consumed by birds, with the seeds then scattered about to choke out native species. One example is Japanese barberry, which also is prime habitat for the deer ticks that transmit Lyme disease, according to Jeffrey Ward, chief scientist in the forestry and horticultural department at the Connecticut Agricultural Experiment Station.

Boaters and fishermen have also brought invasive plants to the area on their boats' bottoms. These invasive plants can be "so fast-growing and aggressive that they crowd out and even eliminate natives, resulting in plant communities that comprise only a few species."⁵²

The National Wildlife Federation mentions that Japanese knotweed has "crowded out indigenous vegetation eaten by invertebrates, and scientists suspect that the loss of these animals may, in turn, be starving green frogs."⁵³ Another culprit is the Asian imported kousa dogwood, thought to have introduced the fungal disease that has decimated native flowering dogwoods that produce berries rich in calcium beneficial to birds and mammals. The fruit of kousa dogwood, in contrast, produces nothing edible for North American wildlife, according to Doug Tallamy, a University of Delaware professor of wildlife ecology and entomology whom my garden club was fortunate to have as a speaker.⁵⁴ As you can well imagine, there is plenty of room for a host of volunteers to eradicate invasives and to educate others about species such as the kousa dogwood.

A Sampling of Organizations Working on Behalf of the Natural World and Her Creatures

American Farmland Trust:

"saves the land that sustains us by protecting farmland, promoting sound farming practices, and keeping farmers on the land."

American Society for the Prevention of Cruelty of Animals:

provides "an effective means for the prevention of cruelty to animals throughout the United States."

Conservation Law Foundation:

"forges solutions to New England's biggest environmental challenges—climate change, clean water, healthy communities—for all."

Cornell Lab of Ornithology:

"interprets and conserves the earth's biological diversity through research, education, and citizen science focused on birds." At the Lab, "scientists, conservationists, engineers, educators, and students all work together for a common purpose: to understand birds and other wildlife, to involve the public in scientific discovery, and to use our knowledge to protect our planet."

Environmental Defense Fund:

"preserves the natural systems on which all life depends. Guided by science and economics, we find practical and lasting solutions to the most serious environmental problems."

Forest Society of Maine:

"conserves Maine's forestlands to sustain their ecological, economic, cultural, and recreational values."

Friends of Acadia:

"preserves, protects, and promotes stewardship of the outstanding natural beauty, ecological vitality, and distinctive cultural resources of Acadia National Park and surrounding communities for the inspiration and enjoyment of current and future generations."

Friends of Katahdin Woods and Waters:

"is committed to working alongside the National Park Service to help protect, preserve, and promote all that is special about Katahdin Woods and Waters National Monument."

Friends of Virgin Islands National Park:

"advances the protection and preservation of the natural and cultural resources of Virgin Islands National Park and promotes the responsible enjoyment of this unique national treasure while educating and inspiring adults and children to be stewards of the environment."

Greenpeace:

"is the leading independent campaigning organization that uses peaceful protest and creative communication to expose global environmental problems and promote solutions that are essential to a green and peaceful future."

Island Institute:

"works to sustain Maine's island and remote coastal communities, and exchanges ideas and experiences to further the sustainability of communities here and elsewhere."

Maine Climate Table:

"creates a state-based model for climate initiatives that increases broad civic engagement and leads to climate action."

Maine Coast Heritage Trust:

"conserves and stewards Maine's coastal lands and islands for their renowned scenic beauty, ecological value, outdoor recreational opportunities, and contribution to community well-being. MCHT provides statewide conservation leadership through its work with land trusts, coastal communities, and other partners." MCHT has protected 322 islands, conserved 150,000 acres of land, created 81 miles of trails, and maintains 129 preserves.

Maine Farmland Trust:

"is a member-powered statewide organization that protects farmland, supports farmers, and advances the future of farming."

Mount Desert Island Biological Laboratory:

"improves human health and well-being through basic research, education, and development ventures that transform discoveries into cures."

National Audubon Society:

"conserves and restores natural ecosystems focusing on birds, other wildlife, and their habitats for the benefit of humanity and the earth's biological diversity."

National Park Foundation:

NPF is the "official charitable partner of the National Park Service." They are connected with all of the national parks across the United States and can help you to develop a relationship with one near you.

National Parks Conservation Association:

"protects and enhances America's National Park System for present and future generations."

National Wildlife Federation:

"inspires Americans to protect wildlife for our children's future."

Two of NWF's many compelling programs are <u>Garden for Wildlife</u>, which connects gardeners to native plants beneficial to wildlife in their zipcode area and its native tree program, <u>Trees for Wildlife</u>. Your garden can become a NWF Certified Wildlife Habitat through providing habitat that nurtures wildlife (<u>www.nwf.org/WildlifeGardenDesign</u>).

New England Forestry Foundation:

"strives to serve and unite people and organizations across the region to support the long-term health of New England's forests, and to guarantee their continued environmental, recreational, and economic benefits for all New Englanders."

Northern Woodlands:

"advances a culture of forest stewardship in the Northeast and increases understanding of and appreciation for the natural wonders, economic productivity, and ecological integrity of the region's forests."

Ocean Conservancy:

"educates and empowers citizens to take action on behalf of the ocean. From the Arctic to the Gulf of Mexico to the halls of Congress, Ocean Conservancy brings people together to find solutions for our water planet. Informed by science, our work guides policy and engages people in protecting the ocean and its wildlife for future generations."

Oceana:

"is dedicated to protecting and restoring our oceans on a global scale."

Open Space Institute:

is "a national conservation organization that works with towns and community organizations interested in creating community forests," according to its president, Jennifer Melville, in an interview with *Northern Woodlands*. Melville explains, "Key to the definition of a community forest is protection."₇₈

Sailors for the Sea:

"educates and engages the boating community in the worldwide protection of the oceans."

Schoodic Institute at Acadia National Park:

"is committed to guiding present and future generations to greater understanding and respect for nature by providing research and learning opportunities through its outstanding Acadia National Park setting, unique coastal Maine facilities, and innovative partnership programs."

Sierra Club:

"explores, enjoys, and protects the planet; practices and promotes the responsible use of the earth's ecosystems and resources; educates and enlists humanity to protect and restore the quality of the natural and human environment; and uses all lawful means to carry out those objectives."

The Nature Conservancy:

"conserves the lands and waters on which all life depends."

Trust for Public Land:

"creates parks and protects land for people, ensuring healthy, livable communities for generations to come."

US Fish and Wildlife Service:

is an agency within the federal government's Department of the Interior whose mission is "working with others to conserve, protect, and enhance fish, wildlife, plants, and their habitats for the continuing benefit of the American people."

World Wildlife Fund:

"stops the degradation of the planet's natural environment and builds a future in which people live in harmony with nature, by: conserving the world's biological diversity, ensuring that the use of renewable natural resources is sustainable, and promoting the reduction of pollution and wasteful consumption."

Xerces Society:

"works to protect invertebrates and their habitats."

All of Your Area's Local Land Trusts:

Examples for our area include Blue Hill Heritage Trust, Downeast Coastal Conservancy, Downeast Lakes Land Trust, and Frenchman Bay Conservancy.

As we move through life, the piece of it that we give to others represents an opportunity to provide meaning and satisfaction, as it takes us outside ourselves and puts us to work on behalf of the common good. Chances are that you are already giving much of yourself to other people and causes. When I consider my circle of friends and what they are doing for the world, I am in awe. Thank you all for your generous-spirited work on behalf of the natural world and her creatures.

DEFINITIONS

Cognitive Behavioral Therapy, as defined by Psych Central, is a "short-term, goal-oriented psychotherapy treatment that takes a hands-on, practical approach to problem-solving. Its goal is to change patterns of thinking or behavior that are behind people's difficulties, and so change the way they feel."

Creative Visualization, as defined by Wikipedia, is "the cognitive process of purposefully generating visual mental imagery, with eyes open or closed, simulating or recreating visual perception, in order to maintain, inspect, and transform those images, consequently modifying their associated emotions or feelings, with intent to experience a subsequent beneficial physiological, psychological, or social effect, such as expediting the healing of wounds to the body, minimizing physical pain, alleviating psychological pain including anxiety, sadness, and low mood, improving self-esteem or self-confidence, and enhancing the capacity to cope when interacting with others."

Green Environments, as defined by Kaplan in 1995, are "any environment that affords an individual the opportunity to view a more green type of scenery."

Green Exercise, as defined by Wikipedia, is "physical exercise undertaken in natural environments."

Guided Imagery, as defined by the US Department of Health and Human Services, National Institutes of Health, is "a mind-body intervention by which a trained practitioner or teacher helps a participant or patient to evoke and generate mental images that simulate or re-create the sensory perception of sights, sounds, tastes, smells, movements, and images."

Holistic Health, as defined by the American Holistic Health Association, is "an approach to life. Rather than focusing on illness or specific parts of the body, this ancient approach to health considers the whole person and how he or she interacts with his or her environment. It emphasizes the connection of mind, body, and spirit."

Mind-Body Interventions, as defined by the National Center for Complementary and Integrative Health (a component of the National Institutes of Health) "employ a variety of techniques designed to facilitate the mind's capacity to affect bodily function and symptoms. These include guided imagery, guided meditation and forms of meditative praxis, hypnosis and hypnotherapy, and prayer, as well as art therapy, music therapy, and dance therapy." They "focus on the interaction between the brain, body, and behavior and are practiced with intention to use the mind to alter physical function and promote overall health and wellbeing."

Mindfulness, as defined by the National Institutes of Health, is "an intentional and nonjudgemental awareness of the present moment."

Psychoneuroimmunology, as defined by Dr. Robert Ader, who coined the term, is "the study of interactions between psychological, neurological, and immune systems."

PHOTO CREDITS

Luna Moth: Dianna Emory Pond in Autumn: Bethany Savage Cliffs of Acadia: Sheridan Steele Snowy Owl: Leslie Clapp Monarch Butterfly on Zinnia: Susan Lerner Puffin and Razorbills: Leslie Clapp Golden Eggs/ Symbols of Shimmering, Healing Bursts of Light: Dianna Emory Garland of Hope: Dianna Emory Isle au Haut: Dianna Emory

REFERENCES

(for your investigation, I have included all from *Bonding with Nature*)

- 1 The Wall Street Journal, "Secrets of Successful Aging," June 20, 2005.
- 2 Cohen, Sheldon. The Perceived Stress Scale, 1983.
- 3 Mayo Clinic. *Patient Care and Health Information*. "Cognitive Behavioral Therapy," March 2, 2017 website, first posted February 23, 2016.
- 4 American Medical Association, American Psychological Association, American Society of Clinical Hypnosis, American Association for the Advancement of Science, World Federation of Mental Health.
- 5 Friedman, Thomas. Thank You for Being Late. 2016, 450.
- 6 Subaru Drive. Spring, 2017, 20.
- 7 Seligman, Martin and Deiner, Ed. "Beyond Money: Toward an Economy of Well Being," *Science in the Public Interest*, volume 5, number 1, University of Illinois.
- 8 Deiner, Ed, Emmons, Robert A., Larsen, Randy J., and Griffin, Sharon. Satisfaction with Life Scale. *Journal of Personality Assessment*, 57, 149-161.
- 9 Moskowitz, Judith. Research cited: "Personal Health: Positive Thinking May Improve Health," *Medinary*, posted March 27, 2017.
- 10 National Institutes of Health. Clinical Trials, posted May 22, 2016.
- 11 Moskowitz, Judith. "Positive Thinking May Improve Health," *Medinary*, posted on website March 27, 2017.
- 12 Levy, Becca. *Journal of Gerontology*. In Brody, Jane. "A Positive Outlook May Be Good for Your Health," *The New York Times*, March 28, 2017.
- 13 The New York Times. "Science Times," March 29, 2016.
- 14 Kuo, Frances, E. and Taylor, Faber. "A Potential Natural Treatment for Attention-Deficit/Hyperactivity Disorder: Evidence from a National Study." *American Journal of Public Health, 94.9*, September, 2004.
- 15 Puett, Robin. "How Does Exercising Outdoors vs. Indoors Influence Mental and Physical Wellbeing?" University of Maryland School of Public Health. Posted November, 2014.
- 16 The Wall Street Journal. "Health Journal," May 10, 2005.
- 17 Neuroscience and Biobehavioral Reviews. February, 2016.
- 18 *The New York Times.* "How Exercise Might Keep Depression at Bay," November 16, 2016.
- 19 Journal of Psychiatric Review. June, 2016.
- 20 Kaplan, Rachel and Stephen. *The Experience of Nature: A Psychological Perspective*, Cambridge University Press, 1989.
- 21 Kelly, M. "Creature Comfort." Health Sciences, Spring 1988, 2-25.
- 22 Fouchaux, J. In J.S. Bland, *Animal-Facilitated Therapy: The Benefits of Equestrian Therapy for the Physically Handicapped with Cerebral Palsy.* University of North Colorado, 1982, 12.
- 23 Friedman and Katcher. In Arkow, P. "Pet Therapy: A Study of the Use of Companion Animals in Selected Therapies," The Humane Society of the Pikes Peak Region, 1982.
- 24 Levinson, B.M. *Pet-Oriented Child Psychotherapy*. Springfield, IL: Charles C. Thomas, 1972.

- 25 Katcher, A.H. "Interactions between People and Their Pets: Form and Function." In B. Fogle (Ed.), *Interrelations between People and Pets*. Springfield, IL: Charles C. Thomas, 1981, 41-67.
- 26 Beck, A.M. and Katcher, A.H., *Between Pets and People: The Importance of Animal Companionship.* New York: G.P. Putnam and Sons, 1983.
- 27 Riddick, C.C. "Health, Aquariums, and the Non-Institutionalized Elderly," *Marriage and Family Review*, *8.*, 1985, 163-173.
- 28 Damon, J. and May, R. "The Effects of Pet Facilitated Therapy on Patients and Staff in an Adult Day Care Center," *Activities and Aging*, *8*, 1986, 117-131.
- 29 McCullough, "The Pet as Prosthesis." In B. Fogle (Ed.), *Interrelations Between People and Pets*, 1981b, 101-103.
- 30 Mugford, R.A. and M'Comisky, J.G. "Some Recent Work on the Psychotherapeutic Value of Cage Birds with Old People." In R.S. Anderson (Ed.), *Pet Animals and Society*, 1975, 54-65.
- 31 Corson, S.A., Corson, E.O., and Gwynne, P.H. "Pet Facilitated Psychotherapy." In R.S. Anderson (Ed.), *Pet Animals and Society*, London: Bailliere Tindall, 1975, 19-36.
- 32 Kroodsma, Don. Backyard Birdsong, Cornell Lab Publishing Group, 2016.
- 33 Katcher, A.H. and Beck, A.M. (Eds.). *New Perspectives on Our Lives with Companion Animals.* Philadelphia: University of Pennsylvania Press, 1983, 412.
- 34 Jared, Peter. "Reap the Benefits of Gardening," Martha Stewart Living, March 2007.
- 35 Sorin, Fran. Digging Deep: Unearthing Your Creative Roots through Gardening, 2009.
- 36 Blair, Steven. Active Living Every Day, Human Kinetics Publishers, 2001.
- 37 Walls, Margaret. "Parks and Recreation in the United States, Local Park Systems," *Backgrounder*, June 2009.
- 38 Walls, Margaret. "Parks and Recreation in the United States, State Park Systems," *Backgrounder*, January, 2009.
- 39 National Parks Conservation Association Press Release, January, 27, 2016.
- 40 National Parks Conservation Association Press Release, March 10, 2017.
- 41 National Parks Conservation Association Press Release, January 27, 2016.
- 42 Brody, Jane. "The Worst that Could Happen? Going Blind, People Say," *The New York Times*, February 21, 2017.
- 43 St. Germaine, Tom. A Walk in the Park, Parkman Publications, 1993.
- 44 Kong, Dolores and Ring, Dan. Hiking Acadia National Park. Falcon Guide, 2001, 2012.
- 45 Kong, Dolores and Ring, Dan. *Best Easy Day Hikes, Acadia National Park.* Falcon Guide, 2011, 2017.
- 46 Fuentes, Jose. National Wildlife, April-May, 2010. From Atmospheric Environment.
- 47 Acadia National Park. From Green, et al., 2005.
- 48 Acadia National Park. From Chandler, et al., 2012.
- 49 Acadia National Park. From Miller-Rushing et al., 2008.
- 50 Acadia National Park. From Cahill et al., 2013.
- 51 Benz, Seth. Schoodic Institute presentation.
- 52 Mittlehauser, Glen H., Gregory, Linda L., Rooney, Sally C., and Weber, Jill E. *The Plants of Acadia National Park*, University of Maine Press, 2010, 5.
- 53 Yeoman, Barry. National Wildlife. "Going Native," April-May, 2017, 31.
- 54 Tallamy, Doug. Lecture. From Bringing Nature Home, Timber Press, 2009.
- 55 Acadia National Park website. "Bees on the Brink," 2010.

- 56 The Natural History Center website. "Checklist of the Birds of Mount Desert."
- 57 The Xerces Society. *Attracting Native Pollinators*. 2011; Charlotte Rhoades Park and Butterfly Garden website. "Butterfly Species," 2017; Insect Identification for the Casual Observer, website, 2017.
- 58 Acadia National Park website; Mittlehauser, Glen H., Gregory, Linda L., Rooney, Sally C., and Weber, Jill E. *The Plants of Acadia National Park*, University of Maine Press, 2010.
- 59 Maine Forest Service, Department of Conservation. *Forest Trees of Maine*. rev., 1995, 17.
- 60 Acadia National Park website; Maine Forest Service, Department of Conservation. *Forest Trees of Maine*, Polar Bear & Company, 1995 rev.
- 61 Singer, Gerald. St. John, Off the Beaten Track, Sombrero Publishing Co., 2016.
- 62 Garrison, Bob. The Last Trail Bandit Guide to the Hiking Trails of St. John, VI, 2014.
- 63 Deloach, Ned and Humann, Paul. *Reef Fish Identification, Caribbean, Florida, Bahamas.* New World Publications, Inc., 2014 Fourth Edition.
- 64 Kaplan, Eugene. Coral Reefs, Peterson Field Guides. Houghton Mifflin, 1982.
- 65 Snorkel St.John website. 2017.
- 66 Virgin Islands National Park website. 2017.
- 67 Collett, Jill and Bowe, Patrick. *Gardens of the Caribbean*. MacmMllan Education Limited. 1988.
- 68 Hargreaves, Dorothy and Bob. *Tropical Blossoms of the Caribbean*. Ross-Hargreaves. 1980.
- 69 Honychurch, Penelope N. Caribbean Wild Plants & Their Uses. MacMillan Education Limited. 1980,1986.
- 70 Lennox, G.W. and Seddon, S.A. *Flowers of the Caribbean*. MacMillan Education Limited. 1978, 1980.
- 71 Virgin Islands Department of Agriculture, Forestry Division. "Series: Exotic Invasive Species." Department of Agriculture website, 2017.
- 72 Virgin Islands National Park. Virgin Islands National Park website, 2017.
- 73 The Wall Street Journal. May 5, 2017.
- 74 Litvaitis, John A., "The Resilient Bobcat," Northern Woodlands, Spring, 2017, 38.
- 75 Cornell Lab of Ornithology. Living Bird, Winter, 2017, 48.
- 76 Selhub, Eva and Logan, Alan. *Your Brain on Nature*. John Wiley and Sons, Canada, Ltd., 2012.
- 77 Louv, Richard. Last Child in the Woods: Saving Our Children from Nature-Deficit Disorder, Workman Publishing Company, 2005.
- 78 Northern Woodlands, Spring 2017, 28.
- 79 U.S. Department of Health and Human Services. *National Survey on Drug Use and Health*, 2006.
- 80 American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders-IV*, American Psychiatric Association, 2000.
- 81 National Institute of Health website. 2015.
- 82 U.S. Forest Service website, "Bat Pollination," 2017, 187.
- 83 Hunter, M.L., Calhoun, A.J.K, and McCullough, M. *Maine Amphibians and Reptiles*, University of Maine Press, 1999.
- 84 Cornell Lab of Ornithology website. "All About Birds," 2017.

- 85 Williams, Florence. The Nature Fix, W.W. Norton, 2017.
- 86 Wilson, E.O. Biophilia, The President and Fellows of Harvard College, 1986.
- 87 Beatley, Timothy. Biophilic Cities, Island Press, 2010.
- 88 Louv, Richard. The Nature Principle, Algonquin Books of Chapel Hill, 2012.
- 89 Lyubomirsky, Sonya and Layous, Kristin. "How Do Simple Positive Activities Increase Well-Being?" *Current Directions in Psychological Science*, in Sage Journals APS, Volume 22, Issue One, 2013.
- 90 Emmons, Robert and McCullough, Michael. "Counting Blessings Versus Burdens: An Experimental Investigation of Gratitude and Subjective Well-Being in Daily Life," *Journal of Personality and Social Psychology*, June 2010: Volume 98, No. 6, 946-55.
- 91 Lawrence, Elizabeth, Rogers, Richard, and Wadsworth, Tim. "Happiness and Longevity in the United States," *Social Science Medicine*, 2015, November: 145: 115-119.
- 92 Gaynor, Michael. "Diet and Depression," *Psychology Today*, website posting October 25, 2014.
- 93 Lazarus, Arnold. In the Mind's Eye: The Power of Imagery for Personal Enrichment, Guilford Press, 1977.
- 94 Web search "foods that help mood": WebMD.com, September 26, 2017.
- 95 Web search "foods that help mood": Foodmatters.com, September 26, 2017.
- 96 Web search: "foods that help mood": Prevention.com, September 26, 2017.
- 97 Web search: "foods that help mood": EatingWell.com, September 26, 2017.
- 98 Web search: "foods that help mood": EverydayHealth.com, September 26, 2017.
- 99 Web search: "foods that help mood": Rodalesorganiclife.com, September 26, 2017.
- 100 Coon, J. Thompson, Boddy, K., Stein, K., Whear, J., Barton, J., and Depledge,
 M.H. "Does Participation in Physical Activity in Outdoor Natural Environments
 Have a Greater Effect on Physical and Mental Well-being than Activity Indoors?"
 Environmental Science and Technology, February 4, 2011.
- 101 Reynolds, Gretchen. "The Benefits of Exercising Outdoors," *The New York Times*, wellblogs.nytimes.com, February 21, 2013.
- 102 Paddock, Catherine. "Green Walking Beats the Blues," *Medical News Today*, May 14, 2007.
- 103 George, Robert. "Just 5 Minutes of Green Exercise Optimal for Good Mental Health," *Medical News Today*. May 4, 2010.
- 104 Fogel, Alan. "Green Exercise: Exercising Outdoors Has More Benefits than Exercising Indoors," *Psychology Today*, posted February 1, 2010.
- 105 Peninsula College of Medicine and Dentistry. "Benefits of Outdoor Exercise Confirmed," *ScienceDaily* website, February 5, 2011.
- 106 Stuckey, Heather and Nobel, Jeremy. "The Connection Between Art, Healing, and Public Health: A Review of Current Literature," *American Journal of Public Health*. February 2010.
- 107 What Works Center for Wellbeing. "Visual Arts, Mental Health, and Wellbeing: Evidence Review," January 10, 2018.
- 108 Society 6 Blog. "These 4 Mental Health Benefits of Viewing Art Will Surprise You."
- 109 All Party Parliamentary Group on Arts, Health, and Wellbeing. "Creative Health: The Arts for Health and Wellbeing." July 2017.