

A group of children, seen from behind, are walking through a snowy forest. They are wearing red winter coats and colorful hats. The forest is filled with tall, thin trees covered in snow, and the ground is a thick layer of white snow. The scene is bright and cheerful, capturing a winter day in nature.

Flourishing in Winter

**Guidance for cold-weather
play by and for early
childhood practitioners**

The importance of outdoor play in early childhood has gained more traction in recent years, yet a main subtopic in conversation has been how to safely support outdoor play in cold weather.

Early childhood practitioners working in areas that experience cold weather have abundant knowledge regarding cold-weather play from their daily lives and activities as educators. To collect this working knowledge, early childhood practitioners from 39 early learning and care programs within the Minnesota Early Childhood Outdoors responded to an online questionnaire about cold-weather outdoor play. Additionally, eight nature-based early childhood practitioners in MN and two nature-based early childhood practitioners in Norway participated in semi-structured interviews.

Their collective knowledge of cold-weather outdoor play is compiled in this handbook, which is intended to serve as a practical “how-to” guide for early childhood practitioners and programs seeking to extend their outdoor play into cold-weather months. As one practitioner pointed out, **“Learning how to navigate cold weather/winter is a life skill that is a game changer for children, families, and educators/practitioners.”** Whether you’re reading this as someone quite familiar with cold-weather outdoor play or as someone just venturing out, we hope this compilation of early childhood practitioners’ knowledge and insight will inspire and support your facilitation of cold-weather outdoor play!



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Contributing programs

10 Acre Wood Nature Preschool
All Seasons Preschool
Anna's Playhouse
Ashdown Forest School
Chester Park Preschool (UMD)
City of Lakes Waldorf School (Birch Kindergarten)
Dodge Nature Preschool
Duluth Nature School
Everwild Nature School
Finland Community Nature ChildCare
First Five Years
Forest School of Minnesota
Hartley Nature Preschool
Jessica Struckman Family Childcare
Jeffers Pond Nature Preschool
Kindred Paths Nature School
Kris Larson's Full Day Preschool and Family Childcare
Lake Superior Zoo School
Little Rubies - A Farm + Nature School
Minneapolis Nature Preschool
Monarch Hollow

My Friends Christian Child Care & Preschool
Nancy's Nature Nook
Nature Tots Preschool
Nilsbyen Friluftsbarnhage
Oak Ridge Nature Preschool (ISD 196)
Pleasant View Playhouse
Prior Lake Circle of Friends Jeffers Pond
Raleigh Academy Voluntary Pre-K
River Wild Learning Center
Roots and Wings Forest School
Saint Paul Public Schools Nature Discovery Pre-Kindergarten
Secret Forest Playschool
Sunrise Nature Preschool
Tamarack Nature Center Preschool
The Back 40 Schoolhouse
The Little Barnyard Preschool
University of MN Child Development Lab School
Wildflower Early Learning Center
Wildlings Nature School
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Table of Contents

X	The Many Benefits of Cold-Weather Play
	Cultivating Positive Attitudes Around Cold-Weather Play
	Communicating with Parents About Cold-Weather Play
	Dressing for Cold-Weather Play
	Gear Suggestions
	Providing and Communicating about Gear
	Dressing Routines
	Strategies to Stay Safe and Warm During Cold-Weather Play
	How Cold is Too Cold?
	Keeping Children Safe and Warm
	Nurturing Children's Risk-Management Skills
	Cold-Weather Play Activity Ideas
	Closing Thoughts
	Appendices
	Appendix A: Examples of Handbook Sections on Cold-Weather Play
	Appendix B: Examples of Newsletters with Seasonal Gear Updates
	Appendix C: Examples of Gear Lists
	Appendix D: Example Infographics of Dressing for Winter Weather
	Appendix E: Example of a Gear Lending Check-Out System

The Many Benefits of Cold-Weather Play

Outdoor play in cold temperatures provides an opportunity to nurture children’s capabilities for outdoor activity in all seasons, not just in “nice weather.”

Many unique benefits and meaningful learning opportunities are connected with cold-weather outdoor play: skills that would not develop as prominently if play were confined indoors during the winter months. One practitioner stated, “Winter is when we see the most growth. Adversity, physical challenges (walking in snow, sliding, sledding, skiing), and confidence lead to development. We see huge leaps in capabilities!” The following are some examples of other cold-weather play benefits identified by practitioners:



- **Physical health and development:** general robustness and hardiness; fewer illnesses: increased physical activity through big body play; improved motor skills, coordination, and balance; increased strength and stamina; improved proprioceptive senses; and activation of brown adipose tissue (“brown fat”) and improved cold tolerance.



- **Mental well-being:** boosts mood; reinvigorates; and exhilarates.
- **Emotional and behavioral regulation:** movement in snow provides natural “heavy work” that helps children calm their bodies; less challenging and unwanted behaviors; and increased positive interactions among children with sensory needs.
- **Curiosity and creativity:** inquisitiveness and wonderment are prompted by winter’s gifts of snow, ice, and cold temperatures, and creative thinking naturally emerges from the “loose parts” of ice and snow.
- **Attentiveness:** noticing and attending to the different aspects of the winter environment, such as different sounds and textures of snow; changes in comfort level based on conditions and amount of activity; tradeoffs between finger dexterity and warmth; and ease of pulling sleds on ice compared to deep snow.
- **Persistence and resilience:** building grit from physically demanding play and movement; fostering resilience through planning for and regularly being out in challenging environmental conditions.
- **Self-Confidence:** feelings of pride and joy from not being limited by the weather; mastery, competency, and independence regarding outdoor dressing routines; confidence from accomplishing challenging tasks (climbing mountains of snow, learning to snowshoe; being out and staying warm in very cold temperatures).

- **Social Understandings:** a sense of community as children verbalize their needs and rely on those around them in a positive way; cooperation to ensure all stay warm; consideration of the group and respectfulness of one another's needs; opportunities to feel seen and protected as peers watch out for exposed skin; opportunities for gratitude and appreciation (for sun's warmth, for cozy fires, for peers who help).
- **Connection to Nature:** feeling more intertwined with nature when out in the winter with only wildlife and trees around; a greater appreciation for how wildlife survives in the winter; a deepened sense of place from experiencing all seasons; hearing the quiet of falling snow; and seeing the "moods of nature."



- *■ **Self-Management:** listening to body signals to stay safe in the cold; noticing what helps to feel warm; learning what happens when gear gets wet and about tree and ice safety; assessing traction on slippery surfaces.
- **Early Academics:** learning science concepts (wildlife adaptations, population dynamics, the water cycle, phases of matter, weather, and friction); science process skills (predictions, hypotheses, experiments, problem-solving); reading thermometers; positive and negative numbers; geometric designs.

Additionally, as children experience cold-weather play in a safe, enjoyable, and ongoing way, their enjoyment and capabilities often extend outward to their families, consequently increasing their families' interest in going outside during the winter months.

Yet when considering the feasibility of cold-weather play, it is often contextualized with safety concerns, as well as the considerable amount of time and effort frequently involved in preparing young children for outdoor play. Yet in practitioners' words, "Cold weather play is a part of being in Minnesota! The research on the benefits is abundant and makes it clear that we can't NOT provide children with these opportunities." Further, "children have been playing outside in the cold long before now. Helping children embrace the cold at a young age teaches them how to be safe in different weather conditions and helps them build self-awareness. They can feel more deeply connected to the environment and their community as they brave the cold with one another."

"Outdoor play is beneficial for motor development and academic development; the temperature doesn't dictate how imperative being outside is to children. I feel very comfortable with cold-weather play because I am confident I can keep children safe while also creating meaningful learning opportunities that would not happen if we stayed inside."

