

***INTERVIEW with Carol J. Amore, Award-winning
Executive Producer & Filmmaker/Photographer***



1. How does the Arctic Polar Bear Mothers film reveal the "Seasons of Life" of a Polar Bear's first year of life?

The mother's snow den is a safe haven for the new cubs to nurse and grow from two pounds to twenty pounds in its first three months. The helpless polar bear cub rapidly grows and is ready to explore outside the mother's snow den under her watchful eyes.

Spring, summer and fall are other seasons of significant learning about arctic life and how to forage/hunt. The winter's solid sea ice from November to February becomes the vital hunting ground for the polar bear mother and her cubs. Their mother even builds snow dens on top the floating ice to protect her cubs while seal hunting at sea.

Hungry male polar bears' presence in all seasons often threatens the very survival of mother and cubs. Most critically, the polar bear's ability to gain significant weight during the winter's sea ice hunt will determine if it would die or live to reproduce the next generation of polar bears.

In 2024, there are about 16,000 polar bears in Canada. In global polar regions, (Greenland, Norway, Russia, United States-Alaska), there is an estimated 20,000 to 25,000 polar bears spread over these other countries in which some populations are monitored by daily satellite tag tracking.

www.arcticpolarbearmothers.com

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includes entire interview document



2. How was this film uniquely created and produced?

Arctic Polar Bear Mothers is a Docu-Music Video with an upbeat and inspiring message for international audiences at all ages. People are curious and caring about the survival of the polar bear mothers and how they will carry forward their next generation of offspring.

The Polar Bear Mother and cubs are one of the best arctic icons to visually tell the story of survival in severe conditions. The cinematography needed to offer a kaleidoscope of perspectives in which to see the Polar Bear mother and her cubs world from above, at ground level and the close-up macro view of the arctic environment. Slow motion and time lapse filming techniques offered further ways to bring the audience closer to the polar bears' lives. Even the macro images of the arctic permafrost were part of the *Seasons of Life* Spring story.

Many specialized arctic polar bear field research contributors were involved that added important information about Canada's Western Hudson Bay area.

Adobe Premier Pro and its AI tools were used in the video editing process to enhance the film's story and workflow process. The dramatic cinematic orchestral and electric violin music was designed to capture the audience as the polar bear mother and her cubs "*Seasons of Life*" changes. An Arctic Polar Bear Mothers theme song was developed for audiences to relive her heroic efforts to protect and provide for her precious cubs.

As a filmmaker, I witnessed an incredibly protective polar bear mother that embraced many maternal touching moments with her cubs and at the same time dealt with a terrifying escape from a brutal predatory male polar bear.

The best microcosm view of the Polar Bear's world was through observing a mother and her two cubs survive all the "*Seasons of Life*".



3. What other film camera techniques were used to capture the Polar Bear Mother and Cub story?

Authorized Canadian drones were used to capture dramatic landscapes over Polar bears' habitats ranging over the formation of the sea's ice floes to the expansive tundra territory in which they travel.

NASA's High Altitude aeriels provided a unique perspective at the terrain in the Western Hudson Bay area.

Canada Centre for Mapping and Earth Observation added highly accurate renderings for targeted high altitude map images.

Arctic Storm Cloudscapes & Night Skies showcased the seasonal transitions that the Polar Bear Mother experiences and was used to give the film's audience a sense of time between day and night. The dramatic and colorful cloudscapes signaled the sun setting and potential storms for the evening or the next day.

Canada's Total and Partial Solar Eclipse occurred on April 8, 2024 with excitement and provided a brief darkness in which the polar bear responded with some confusion and reacted as if the night was beginning.

Canada's Supermoon occurred in November 2024 when the full moon's orbit was the closest to the earth. It was filmed with birds flying in front of the camera to show how gigantic this Supermoon looked in the sky.

Night sky time lapse filming was used to better see constellation stars, meteors and even certain planets closest to the arctic like Saturn. Time Lapse motion allows the audience to take a closer look at what they are observing to hold their curiosity about the arctic skies.



4. What Night Sky Constellations have been used within the film?

The **Great Bear Constellation**, Ursus Major, has been showcased in the film with a polar bear walking through this constellation to bring it to life.

Orion the Hunter Constellation, brightest in winter, is often found by locating Orion's belt which is formed by three bright stars (Alnilam, Mintaka and Alnitak). The Orion the Hunter constellation has been included in this film to respect the Inuit and Cree arctic tribal hunters that have been part of the polar bear's world through time.

Due to the polar bear's endangered status, tribal hunting of polar bears have decreased and their hunting has been used for community survival.

On August 11-12th 2024 the Perseid meteor shower had over one hundred shooting stars at the same time the Aurora Borealis was displayed in the night sky.

In September 2024, The planet Saturn was even visible from Western the Hudson Bay shoreline.



5. How were the Aurora Borealis night sky images used in the film?

The Northern lights, Aurora Borealis, in the night sky looks like a swirling greenish-blue river of light based on the daily interactions with the solar winds, gases in the atmosphere, and the Earth's magnetic field. No two Northern lights are ever the same. In the Canadian arctic circle, the Aurora Borealis can be seen 240 nights per year from August to May.

The Aurora Borealis has unpredictable swirling movements like an aerial abstract painting. The Northern lights became an important part of the film's ancient sky stories. The Aurora Borealis is a predictable seasonal constant in the sky and holds deep meaning for many arctic tribal cultures.

Wide angle camera lenses work best for nighttime low light conditions. The silhouette trees in the foreground and/or rock formations give the film audience a great sense of the majestic size of the Aurora Borealis (Northern Lights). A sturdy tripod is needed for long camera exposures. Avoid tripod camera shake from the wind by using something to weigh its center down.

This night sky lightshow beauty illuminates and also helps the polar bear gain from this reflected light during the dark nights on the sea ice while hunting seals.

Polar bears must navigate on land and by sea with the reflections from the night sky to find the best direction for safe hunting at sea. From November to the end of February, the Arctic can have a dark sky during the daytime which means the polar bear uses more stealth in its seal hunting abilities.



6. How were the underwater arctic ice videos taken and Beluga whale summertime videos captured?

Dynamic underwater images were made from experienced arctic cold water divers who were gathering ice data samples to assess the health of the Western Hudson Bay area.

Sometimes, the polar bear would submerge its entire head underwater just to look around for potential seal den sites which are located between heavy ice and breathing holes dug by their clawed flippers.

Each summer about 4,000 beluga whales migrate to the Churchill river in Manitoba, Canada to feed, mate and give birth. In the Western Hudson Bay, there are about 57,000 beluga whales between mid-June and mid-September

In this film, the beluga whales and their gray colored calves were filmed with a range of underwater cameras in the Churchill river where large numbers gather. They are playful and friendly to humans.

Canadian licensed drone operators were used for the film's aerial scenes. Sometimes, Orca whale pods travel into the Western Hudson Bay area to prey on the many Beluga whales.

All storytelling image-making was dedicated to creating a compelling visual experience for international audiences to see the world through the senses of a Polar bear mother and the challenges of raising her cubs through the first year of their lives.

7. How did you prepare to film in extreme cold conditions?

Getting GREAT images is about the quality of the filmmaker preparation. Anticipation is a core capability of capturing the moment and having one's camera equipment ready. Never underestimate what freezing cold weather can do to camera equipment and your body.

Anticipating the severity of the freezing cold was vital for vehicle selection (open windows), camera equipment protection (low vibration), and arctic clothing gear to fight against extreme winds and life-threatening temperature conditions. Frostbite was a constant concern as well as eye care with the UV/dry weather conditions.

An insulated parka, waterproof jacket, insulated boots and thick mittens/gloves are absolutely critical to advance assess their fit for this arctic film adventure.

Try silk liners within your gloves, head covering and socks to give you added warmth throughout the day and for nighttime filming. Remember cold hands can easily drop camera equipment.

Tundra buggies that had a rugged wheel elevation of about ten feet was a strategic advantage. During filming the Tundra buggy motor was best turned off to stop any vibration to tripods holding long lenses or even bean bags on the window mounts to stabilize the camera lens.



It is important to have back-up plans for any physical danger and the unpredictable movements a polar bear may have to surprise you. If walking outside the Tundra buggy vehicle, a polar bear can be easily disguised in a snowbank with willow bushes surrounding it. The filmmaker needs an exit plan before the polar bear appears.

Running will only trigger the polar bear's response to chase. The polar bear will win. Reducing risk for everyone that might be filming/photographing outside the tundra buggy is vital. For instance, an innocent photo of an arctic fox can be beautiful yet at the same time there could probably be polar bears nearby in the willows with the heavy snow banks.

Prepare your own cold/high wind weather first aid pocket kit to carry in your camera backpack. Care for your eyes using gel eye drops and protect your nose, lips and entire face from frostbite.



8. How will the extreme cold impact the filmmaker's on-site camera operation?

Remember your cameras need to operate in freezing temperatures. The fogging of lenses will ruin your images. You will need to keep the camera at the same freezing temperatures as the outside air.

Protect your head, hands and feet from the severe cold and you will have more endurance for your image-making goals.

Protect your eyes from the UV reflection from the sun and ice reflections. Eyes can also fatigue faster in cold dry air conditions. Be careful about keeping long lenses outside the tundra buggy window as the polar bear can jump to grab your camera lens while right below the window.

Buy extra camera/video batteries with multiple chargers. The extremely cold weather reduces the camera battery's charge. Keep extra batteries in a container and/or glove to keep them at room temperature or keep them inside your jacket.



**Inuit Carving-
Polar Bear
Soapstone
Sculpture
used in film**

9. What are the best ways to film Polar Bear mothers and her cubs in the first year of their lives?

Learn from experienced polar bear filmmakers/photographers about how they achieved their best observations of polar bears and what time of the year worked best. Many filmmakers will travel to Churchill, Manitoba to witness the polar bear's Sea Ice Migration in October through late November.

All polar bears are very hungry and will actively test the ice to see if it is solid for walking to begin ringed and bearded seal hunt.

While waiting for the ice formation, the male polar bears will also actively fight to display their dominance to other polar bears.

Hungry male polar bears are a constant threat to the polar bear mother and her cubs. The polar bear mother can deliver a fierce charge to deflect the male polar bear's attention away from her cubs. At the same time, she does risk injury from the male polar bear which is twice her weight. When I was filming this attack, the polar bear mother was successful in raising herself up to forcefully propel herself directly at the male's chest with her gigantic clawed paws.

She had my admiration as she defended her two cubs at risk of life-threatening physical injury. I truly had to keep my camera steady while seeing such a violent fight for life.

In March-April with denning snow banks, select permits are given to lodge locations in the Churchill, Manitoba area. These Polar Bear denning sites can allow for filming as the polar bear mother opens her den for the cubs to first leave the den. Wapusk National Park is one of the well-known denning sites in this area.

Never let your guard down and constantly watch all around you and others. Polar Bears are highly intelligent and will silently hunt your position especially if you are on land. Many polar bears are accustomed to firecrackers as a temporary deterrent and will quickly return to your location.

Think ahead of your strategic filming locations for a secure shelter.

Carrying film and camera equipment along with different tripods is not easy to maneuver even for two people. Rehearse how you plan to protect and move quickly with your film/camera equipment.

Most of all, learn to anticipate Polar Bear behaviors so you are ready for its expected and unexpected behaviors. See documentary Polar Bear films to gain more observational experience from others' perspectives.

10. TECH Check- Filming Arctic Polar Bears

Gain Digital Camera and Video Camera advice from experienced professionals:
(Cold-weather Expedition Experience is a plus for a camera equipment advisor.)

B&H Photo in NYC has dedicated departments with expert advisors to listen to your needs and make some camera/video equipment recommendations for purchase. Ask for their best pricing www.bhphotovideo.com.

If you purchase from B&H they can also schedule **FREE online coaching sessions** to learn how to best use your camera/video equipment. They have excellent experts.

Some camera lens selections could be: Long Lens 500mm single focus and/or zoom with 100-400 mm with low f-stops. For nighttime astrophotography, bring a range of wide angle lenses like 35mm, 24mm and 14 mm (Fish Eye lens). The Macro 100mm lens is vital for close-up images of the environment. Avoid changing lenses outside so having a second camera body is good to have. Have extra back-up Rugged 5T Lacie drives for downloading daily images.

Contact **ReallyRightstuff.com** for the best connecting devices to secure the camera to your specific tripod mount. They are highly experienced in all camera fittings, tripod heads and tripods. Have your camera and tripod next to you when you contact them.

Check out the best navigational phone technology (rugged Garmin Expedition phones) and test them before leaving on your film/photo expedition. (B&H carries a range of navigational/communication devices.)

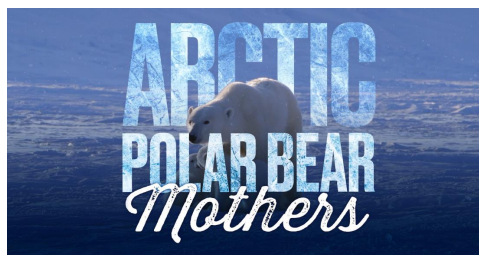
Apple Air tags are great for tracking your camera equipment gear including video cameras and DSLR cameras, tripods, winter parkas and even gloves.

Carry a clip-on on thermometer/compass to the front of your jacket/parka so you can personally monitor the combined temperature and wind chill impact.

Bring several good headlamps with extra batteries that can be used to best see your camera equipment and even wear it on your wrist to see potential ice/snow surfaces for walking.

FUN- LIVE Webcams at a variety of Churchill, Hudson Bay Locations. Polar Bears are more active on these webcams from October through November before the freezing of the sea ice. These webcams can be found at polarbearsinternational.org

Arctic Polar Bear Mothers “Seasons of Life” starting from the Mothers Winter Den through the Next Winter’s Sea Ice hunt is a journey that will make you curious and caring about the polar bear mother and her cubs’ lives.



CAROL J. AMORE

EXECUTIVE PRODUCER, FILMMAKER/PHOTOGRAPHER
INTERACTIVE E-BOOK DESIGNER/AUTHOR



Carol J. Amore is an award-winning wildlife filmmaker-photographer-producer whose sense of adventure leads her into remote parts of the world. She believes the soul never thinks without a picture and that the filmmaker will help preserve wildlife through finding those great images that enrich and elevate the lives of others.

- Cannes World Film Festival BEST Nature/Wildlife Film 2024
- Accolade Global Film Competition 2024- Music Video Winner
- IndieFEST Film Festival 2024- Music Video Winner
- BEST SHORTS Film Competition 2024- Music Video Winner
- Film Festival Freeway.com lists over one hundred awards received in 2024

Ancient Lands and Lives Film Productions is her company dedicated to creating compelling wildlife stories including tracking India's wild tigers; filming Africa's big cats and wildebeest & zebra migrations; navigating tundra buggies to film Arctic's polar bears, and exploring American's wilderness through the lives of North American big cats and wildlife.

In 2024, ArcticPolarBearMothers.com is an engaging docu-music video that showcases the unique life of a polar bear mother and her cubs survival in the arctic's harsh environment.

In 2023, Ancient Lands and Lives-Above the Grand Canyon Rims, a high-impact music video was designed to inspire domestic and international audiences to experience the Grand Canyon's sweeping landscapes, unique wildlife interactions and its tribal sacred lands. For many people and families, the Grand Canyon is a remarkable lifetime immersive experience imprinted in their memories forever.

Carol believes in the synergy of new camera systems and video production technologies to capture the best images for the film's story. Innovative 4K filming-photography, special time-lapse filming, state of the art video production techniques using AI motion graphics and original music composition with the world acclaimed Mark Wood, original member of the Trans-Siberia Orchestra, has enhanced this upbeat music video to inspire the preservation of the Grand Canyon areas and its wildlife. (www.ancientlandsandlives.com)

Wildlife is her passion and her purpose to work towards meaningful conservation solutions for endangered wild animals and humans to coexist. For Carol, actions speak louder than words when it comes to saving wildlife. Her award-winning **20 Ways To Track A Tiger** interactive e-book is part of a global media engagement effort to continue with her wild tiger conservation efforts. (www.tigerstracking.com) Her **TIGERS-Tracking a Legend** documentary film and music video won the Cine Golden Eagle and International Wildlife Film Festival Awards.

Carol is also a member of the ASMP (Association of Media Photographers) and NANPA (North American Nature Photographers Association). She is also a member of The Explorers Club, an Acclaimed Global Exploration Organization



Immerse yourself in the "*Seasons of Life*" of a heroic Polar Bear Mother who has to protect and provide for her hungry cubs everyday in the everchanging arctic weather extremes.

Feel the constant high winds, see the amazing arctic night skies (Aurora Borealis) and explore the Western Hudson Bay shoreline.

Roam the expansive tundra territories in the spring, summer and fall seeing arctic & gray wolves, lynxes, arctic & red foxes, wolverines, and moose.

Arctic birds of prey (gyrfalcon, golden & bald eagles, great gray owl, snowy owl, great-horned owl and peregrine falcons) are also an active part of the film's arctic seasons of life.

Plunge into the winter's frozen icy cold waters with the stealthy polar bear mother and cubs to hunt on the deep sea ice for their life-saving high energy food- ringed and bearded seals.

Arctic predators (mostly male polar bears, arctic wolves) will challenge this endangered polar bear mother's courageous survival instincts. As a mother, she will nurse her cubs even without nourishing herself to rapidly build their strength and to grow them to be independent as magnificent marine and land predators within two to three years. Her cubs are part of the next generation of hope for polar bear survival.

www.arcticpolarbearmothers.com

The Filmmaker's Perspective- Arctic Polar Bear Mothers



From a Docu-Music video filmmaker's perspective, the fiercely independent polar bear mother and two innocent cubs frequently faced menacing male polar bear predators which was the essence of this dramatic arctic mother protector/provider story.

The mother sacrificed her nourishment for months to nurse her young cubs. Her cubs became magnificent marine and land predators within two to three years. Their real life test was their survival during the winter ice sea hunt for ringed seals. As they learned through their mother's guided ice sea hunt experience they became part of the next generation of hope for polar bear survival.

During different Arctic *Seasons of Life*, other arctic wildlife interactions included arctic & gray wolves, lynxes, arctic & red foxes, wolverines and moose. Arctic and migratory birds of prey (gyrfalcon, snowy owl, great-horned owl and peregrine falcons) were also showcased within the film.

In Canada's Western Hudson Bay, the film's cinematography included a blend of below freezing arctic tundra, frozen shoreline waters, underwater ice filming, dynamic sea and land Canadian drone aerials, the arctic night sky constellations and the nighttime's vibrant Aurora Borealis green-blue streaming colors.

This film's motivational and exciting orchestral music has been woven into each *Season of Life* scene ranging from the mother's den to the sea ice hunt. This Docu-Music video approach is designed to fully engage domestic and international audiences as well as inspire learning.

The dedication of all involved in the filming and editing of this film deserve an award for their perseverance and determination. Global arctic polar bear researchers and their scientific networks have remarkable expertise to inform the world of the arctic's ever-changing ecosystems.

Polar bear mothers are the real heroines that overcome obstacles each day and every year of their lives to protect their cubs.

Carol J. Amore
Executive Producer & Filmmaker/Photographer
Arctic Polar Bear Mothers.com (Film completed December 2024)