

# BIOSPHERE INSTITUTE OF THE BOW VALLEY

Powered by a superb and deeply collaborative staff, with support from a thoughtful and dedicated board, we have had a truly amazing year of firsts!

In the community, we marched in our first ever Canada Day Parade, and then ran a booth and coordinated the Canmore Folk Festival's Green Team. Later in the year, we were thrilled to host the Bow Valley's first post-pandemic square dance, and hold our first ever Gala – in celebration of our 25th Anniversary!

In our Climate Transitions program - for the first time - we trained volunteers to help booth visitors understand what they could do to accelerate climate action. In the spring we held a wildly successful Electric Vehicle Expo, and co-hosted the first Eco Solar Home Tour to spotlight environmental practices in our community. In the fall we convened over eighty participants in 'Accelerating Climate Action in the Bow Valley,' pursuing climate action through a multi-solving approach.

WildSmart saw a number of firsts, as we leveraged our new, powerful training platform to prepare our Wildlife Ambassadors for field work; and we convinced the provincial government to re-start the Roundtable on Human-Wildlife Coexistence, an important valley-wide conversation involving elected leaders and wildlife specialists.

On the education front, we hired our first full-time environmental educator, and we celebrate our increasingly deep level of engagement with our Îyarhe Nakoda neighbours.

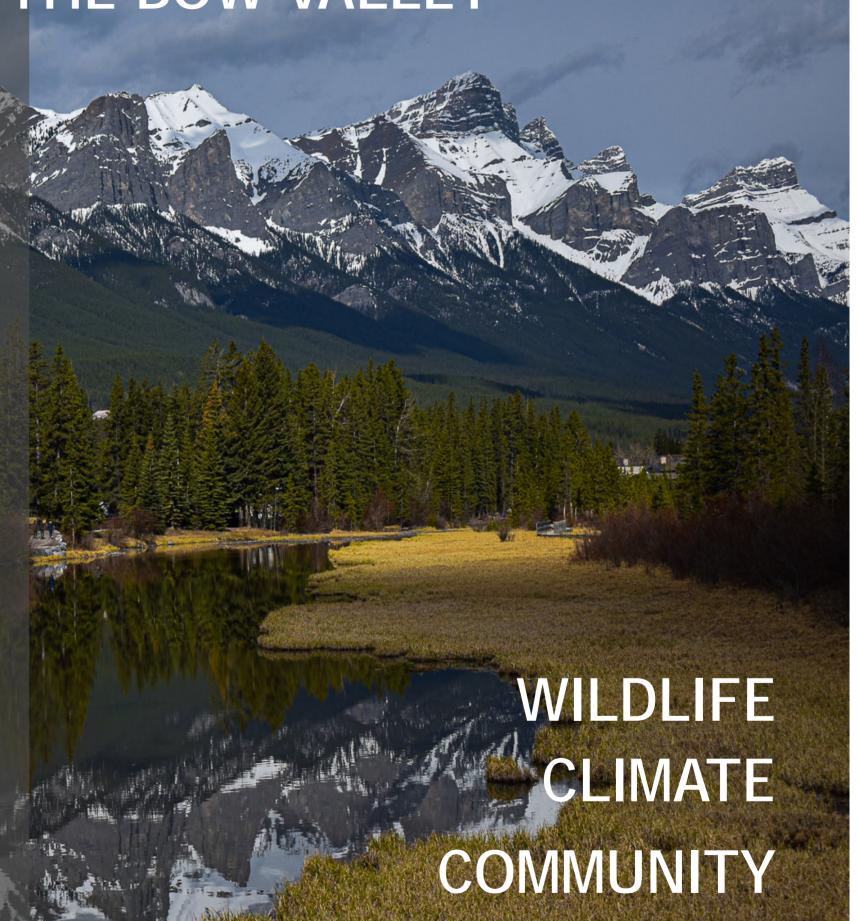
... And the community is taking notice! We are so grateful for the unprecedented level of donations from community members, and a generous new multiyear grant from the Town of Banff to support our work there.

Thank you to our fabulous funders, partners, volunteers and stakeholders who contributed their resources, time, and expertise in this essential work. Please read on to find out how we rocked the Bow Valley in 2022!

Gareth Thomson Executive Director

The Biosphere Institute of the Bow Valley is located in Châ Ûpchîchîyen Kudebi (Canmore), which stands on Treaty 7 territory, the traditional lands of the Îyâxe Nakoda Nations of Goodstoney, Chinki, and Bearspaw; three Nations of the Blackfoot Confederacy, the Pikani, Kainai and Siksika; the Tsuut'ina First Nation, and the Métis Nation of Alberta, Region III.

We acknowledge the past, present, and future generations of these nations and all Indigenous peoples of this place who help us steward this land, as well as honour and celebrate this place of creativity, collaboration, and learning.



# **WILDSMART**

WildSmart is a proactive conservation program that encourages efforts by communities to improve human-wildlife coexistence.

With pandemic disruptions easing in 2022, people eagerly returned to the trails. Wildlife Ambassadors spent over 970 hours engaging with a record number of trail users and outreach event participants. Demand was high: the WildSmart program attracted new volunteers, received more outreach requests than had capacity to fulfill, and grew followers and subscribers.

While less people were reached online, WildSmart delivered more hands-on bear spray training and Ambassadors had more and higherquality conversations with the public this year than the previous year.

BEAR REPORT SUBSCRIBERS 3,726 WILDLIFE
AMBASSADOR
VOLUNTEER
HOURS

971

WILDLIFE
AMBASSADOR
CONVERSATIONS
WITH THE PUBLIC
12,607

### **WILDLIFE AMBASSADORS**

The Wildlife Ambassador program was invigorated with the return to in-person activities as well as being recognized at the Mayor's Celebration of Volunteer Excellence. Eight new volunteers joined the program, and our 20 Wildlife Ambassadors averaged over 40 hours each over the year. Ambassadors continued to do winter roves to reach underprepared trail users and encourage wildlife safety practices year-round.

We also moved the Wildlife Ambassador training online for the first time, making the training more accessible to volunteers, regardless of pandemic restrictions.

"Every single time I heard
Derek and Karen do a presentation I learned something new despite being here for almost 10 years! They are very knowledgeable and entertaining. I have heard from individuals that attended the sessions that they feel more comfortable getting out there and exploring, as they know now how to stay safe, and how to behave in case of an encounter with an animal, and most importantly how to avoid one."

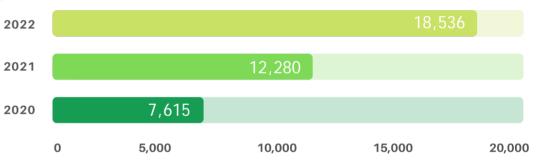
Katarzyna Wroblewska,

# INCLUSION AND NEWCOMER PROGRAMMING

We continued inclusion programming in partnership with Settlement Services in the Bow Valley by providing wildlife safety training to ewcomers, immigrants, and refugees. This training occurred before inclusion programs like 'Try Skiing', 'Try Biking' and 'Try Disc Golf' began, ensuring that newcomers felt safe and confident to recreate on the trails.

Settlement Services
in the Bow Valley

TOTAL IN-PERSON CONTACTS



### **INTERNATIONAL EXPOSURE**

We attended the 6th International Human-Bear Conflict Workshop on October 16-20 in Lake Tahoe, NV and presented to over 300 people about our 'Trusted Messengers Project' as part of a panel group discussion about "Engaging Communities in Human-Bear Coexistence Research."

Communities from as near as Bragg Creek and Cochrane to as far as South Africa and Mexico reached out to our WildSmart Program Director for advice on developing a strong human-wildlife coexistence education program for wildlife such as bears and baboons. This indicates communities are actively seeking information about best practices, and represents an opportunity for us to share our program design and successes to benefit communities around the world.





"We were very fortunate
to have had the WildSmart
Program come into our classrooms
to give a presentation, sharing
practical knowledge on wildlife safety.
Not only did the students express how
much they learnt and enjoyed the
presentation, but they also shared how
much more confident they feel about
wandering in our mountain
communities.

Matthew Albas, ESL Teacher, Bow Valley Learning Council

# WILDSMART

# LEADERSHIP ON HUMAN-WILDLIFE COEXISTENCE

As an active member of the Human-Wildlife Coexistence Technical Working Group (our Executive Director Gareth Thomson co-chairs this Group), WildSmart is one of several partners providing leadership around human-wildlife coexistence, working to implement the specific recommendations that stem from this collaborative, multi-stakeholder effort.

TV, RADIO & NEWSPAPER INTERVIEWS 42

website visits 62,374



### TOOL LENDING LIBRARY

In 2022 we observed next-level efforts by the Town of Canmore on both the education and enforcement fronts. We also had record numbers of Canmore residents – double from last year, in fact – borrowing our fruit pruning equipment, doing their part to keep bears out of trouble.



We would like to acknowledge the positive steps we have made as a community in raising awareness about and implementing measures to improve human-wildlife coexistence such as residents securing and/or removing wildlife attractants from their yards, but also fully acknowledge that our work is not yet done and we need to continue to work toward a better coexistence with bears in the Bow Valley.

# SHIFT: CLIMATE TRANSITIONS

**ECO-SOLAR** 

**HOME TOUR** 

**VISITS** 

244

The Shift: Climate Transitions program empowers local residents and businesses to take action on climate change. We lead projects that focus on solutions in buildings, energy, transportation, and waste; convene key sectors around climate action; and collaborate with partners to mitigate and adapt to climate change.

In 2022, Shift promoted tangible community actions on climate change and began a process of Collective Impact in our community. In the face of rising global emissions and increased polarization, this year Shift initiatives began from a foundation of equitable and just solutions that benefit both our communities and the environment.

### **BOW VALLEY ISN'T DISPOSABLE**

In June we began working on 'Banff Isn't Disposable', which seeks to normalize reuse in Banff through an innovative reusable takeaway container program, building engagement and support at the Banff Farmers Market with the local community. The Town of Banff passed a bylaw in early 2023 that strongly discourages single use items, and we're now engaging with partners such as Banff Lake Louise Tourism and Banff Lake Louise Hospitality Association to effectively implement reusable food ware solutions, and providing training and on-line resources to hasten the transition and support the community in light of this important new legislation.

### **ECO-SOLAR HOME TOUR**

In partnership with the Eco-Solar Home Tour Society, we held a one-day self-guided tour of sustainable homes and buildings. This event displayed homes and businesses taking leadership on high-performance building design, construction, and homeowner practices. This was the first time Canmore participated in the Eco Solar Home Tour and there were over 244 visits to the six buildings on the tour.

In 2023, we're organizing the next iteration of this unique event: our Green Buildings Open House will take place throughout the Bow Valley.

ATTENDEES AT OCTOBER ACA EVENT 80

NUMBER OF PERSONAL COMMITMENTS 60

**ACTION GROUPS FORMED** 10

### **ACCELERATING CLIMATE ACTION**

In the wake of recent extreme weather events, climate change is a top of mind issue for Bow Valley residents. In 2022, we began accelerating climate action in the Bow Valley by convening community members, organizations, and businesses to work together in a multi-year Collective Impact progress.

### This year, we:

- Joined three Town of Canmore staff on monthly Climate Cohort training sessions with the Tamarack Institute
- Brought together a multi-sector Advisory Committee
- Convened a community-wide gathering on October 12, 2022
- Secured funding through the University of Calgary to continue the work of action groups in 2023

"This was an educational and inspiring workshop. It was a pleasure to connect with the many passionate participants."

> Amanda Kelly, Graymont



Advisory Committee in June 2022





# "I've found enjoyment in helping others to understand new things. Volunteering with the Biosphere Institute's EV event seemed like a fun way to help others understand new things and for me to get involved in the community. The Plug'n Drive Bow Valley event was incredibly valuable because of the variety of different needs it was able to address: it drove EV awareness, intention, and understanding."

# SHIFT: CLIMATE TRANSITIONS

"You changed my whole view of EVs. I used to think it was just nice - now I think it is the way to go!"

Plug'n Drive electric vehicle test drive participant

### **ELECTRIC VEHICLES**

To promote the adoption of electric vehicles, we facilitated a 5-part webinar series, created local resources and videos, hosted electric vehicle test drives with the non-profit Plug'n Drive, and held Canmore's first Electric Vehicle Expo. Our surveys tell us that we helped remove barriers to people purchasing an electric vehicle. High turnout at our events indicates that many residents in the Bow Valley are enthusiastic and ready for electric vehicles.

EV WEBINAR VIEWS

317



EV VIDEO VIEWS 586

EV EXPO ATTENDEES 1,000+



PLUG'N DRIVE EV TEST DRIVES

313

### **EDMUND ONG**

Edmund is a resident of Canmore who loves the town's bike- and walk-ability. He volunteered with the Biosphere Institute for the Plug'n Drive electric vehicle test drive event in Banff and Canmore. Edmund was thrilled to help event attendees see that taking climate action is both achievable and rewarding. And he was delighted to be able to share some of this experiences with His e-bike and building a net zero home.

SHIFT VOLUNTEER

### **COMMUNITY GENERATION**

In collaboration with Bow Valley Green Energy Cooperative (BVGEC), we selected a socially-minded organization to install a community-owned renewable energy project that will act as a demonstration site for community generation, the synagogue Temple B'nai Tikvah in Calgary. In 2022, we promoted community generation through webinars, blog articles, and the development of a Community Generation Manual. The 27kW solar PV system is slated for completion by fall 2023.

# **FUTURE LEADERS**

Through place-based environmental education, we collaborate, connect, empower, and celebrate K-12 student action in the Bow Valley.

In 2022, the Future Leaders program was revitalized with return to in-person programs and opening of schools. We hired a new full-time environmental educator, and our programming had both breadth reaching thousands of students, and depth through monthly programs with five classrooms. We started building up our program offerings through a collaborative and responsive approach to teachers' needs in outdoor learning, climate change education, integrating Indigenous perspectives and local youth action projects.



LEFT: Grade 11 students pulling invasive species.

RIGHT: Ava Vanderbeek (right), and Maya Carr (centre) winners of the 2021 and 2022 Mountain Spirit Award with Biosphere Institute Environmental Educator Heidi Widmer (left).



### **GRADE 9-12 YOUTH ACTION PROJECTS**

We engaged grade 9-12 students by inspiring youth action projects, such facilitating an invasive species (yellow clematis) pull with grade 11 students on municipal land in Canmore.

During Career Exploration Week, we hosted two grade 9 students for a full week of professional development. The students focused on researching environmental impacts of food and created an interactive "carbon foodprint" display.

The Canadian Rockies Youth Network (CRYN), a collaborative initiative with the Biosphere Institute, is now a thriving, self-sustaining organization. Two previous student leaders, Ava, Vanderbeek and Maya Carr won the 2021 and 2022 Mountain Spirit Award. CRYN and Biosphere Institute co-hosted a retreat and online training session in fall 2022. We also identified a need for more Bow Valley youth representation in the CRYN, and in 2023 will launch a complementary group of local youth to strengthen the capacity of this inspiring initiative.

PARTICIPATING SCHOOLS

10





STUDENTS CONTACTED 1205

OUTDOOR SESSIONS 20



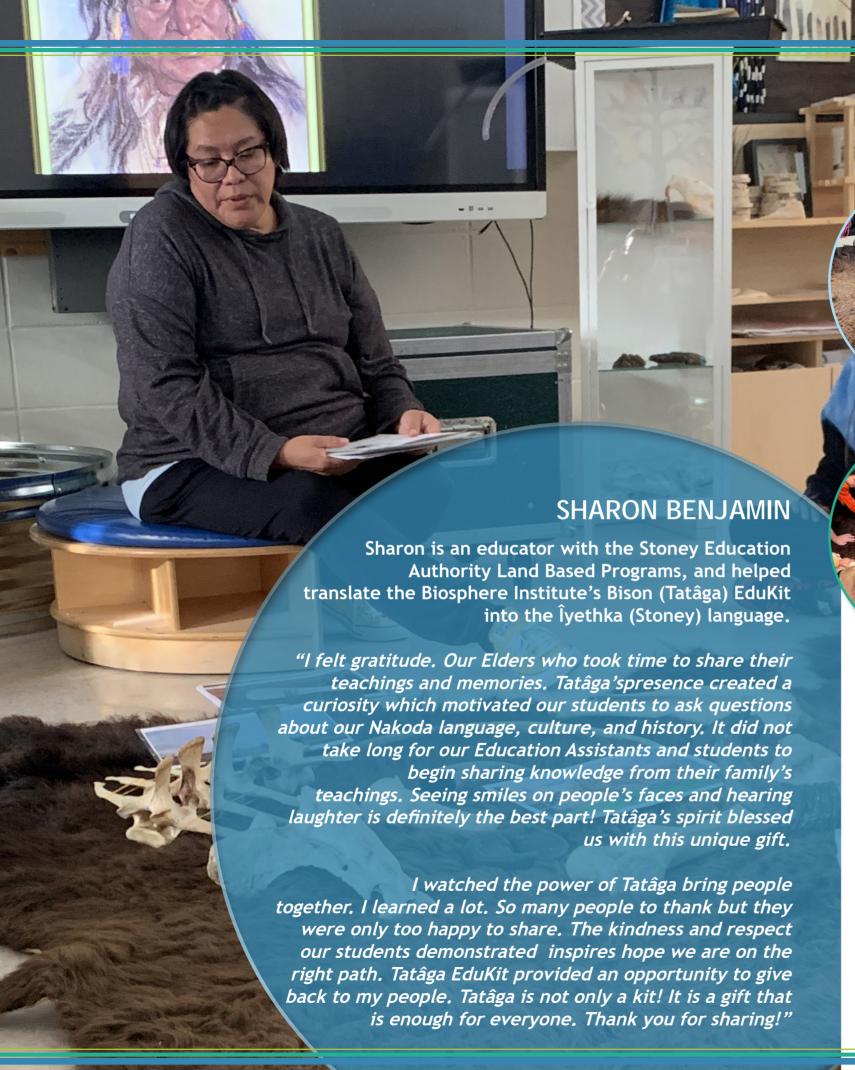
### K-8 PLACE-BASED CURRICULUM

The communities of Banff, Canmore, Exshaw and Mînî Thnî (Morley) are situated within the dynamic montane ecosystem. By collaborating with local teachers and providing meaningful outdoor learning experiences, our K-8 programs connect the curriculum to the surrounding environment.

We provided curriculum-connected outdoor learning sessions to five classrooms monthly during the 2022-23 school year. These programs were intentionally designed to deepen students' understanding and relationship with place, and provided valuable experiential outdoor learning.

Our education on human-wildlife coexistence continued through student programs using our elk, bear, wolf, and bison Edu-Kits.





# FUTURE LEADERS

### EDU-KIT: ÎYETHKA STONEY LANGUAGE

Upon learning about our bison EduKit, the land-based learning team at Nakoda Elementary School expressed interest in translating EduKit resources into the Stoney language and inclusion of traditional Stoney uses. The Future Leaders staff provided the EduKit and a group of Stoney-Nakoda Elders and Stoney Education Authority staff facilitated the translation of the bison EduKit materials into Stoney language and the traditional uses. The translated EduKit resources visited classrooms in Mînî Thnî, Eden Valley and Big Horn.

We're exploring future opportunities to translate other EduKits into Stoney and support these communities in developing culturally-relevant EduKits. The bison EduKit continues to travel to Indigenous and non-Indigenous classrooms to teach about the deep ecological and cultural significance of bison (Tatâga).

K-12 STUDENTS REACHED 1,271 FALL PROGRAMS DELIVERED



"Bison are great! They should roam free like you and me! Just not near the highway."

Grade 5 student, École Notre Dame des Monts

### **GRADE 5 SOCIAL STUDIES**

Parks Canada sought public input on the Bison Reintroduction Project in Banff National Park. Future Leaders responded to the request by engaging Grade 5 students in Canmore and Mînî Thnî as part of their social studies curriculum. The in-class engagement resulted in 32 student comments submitted and positively received by Parks Canada!

## IN THE COMMUNITY

With the return to large in-person events, we hosted booths at community events to promote our programs and inspire volunteerism and action, and held a large fundraiser to celebrate the our 25-year anniversary!



### **CANMORE FOLK FESTIVAL**

Our Community Engagement Intern acted as the Canmore Folk Festival Green Team Coordinator. With the help of over 60 volunteers and staff, we educated the public on how to recycle and compost properly, kept the festival grounds clean, and managed all waste throughout the 3-day festival. Because of our efforts and the people supporting us, we were able to divert 89.1% of this event's waste from entering the landfill.

### **CANADA DAY**

Wildlife Ambassadors and Biosphere Institute staff marched the Canada Day Parade in Canmore. We're proud to participate in this festive event.



### **GALA & SQUARE DANCE**

This year, Biosphere Institute celebrated a HUGE milestone – 25 years! We celebrated with a Gala and Square Dance at the Cornerstone Theatre. Our silent auction raised important funds to progress our work.



### **TRUTH & RECONCILIATION DAY**

For Truth & Reconciliation Day on September 30, each of the Biosphere Institute staff reflected on each of their individual journey and commitments toward truth & reconciliation. We purchased and displayed an Every Child Matters flag crafted by Ktunaxa, Athabascan, and Cree artists to honour missing children and residential school survivors. Staff also spent an afternoon discussing our personal reflections and how we can better integrate truth & reconciliation into our organizational practices.

In 2023, we'll further our staff and board training on equity, diversity, and inclusion including Indigenous Awareness.

### **OUR SUPPORTERS**

Alberta BearSmart
Alberta Ecotrust Foundation
Alberta Gaming, Liquor and Cannabis (AGLC)
Alberta World Cup Society
ATCO Energy Ltd
ATCO Electric

Banff Canmore Community Foundation
Calgary Foundation

Canadian Rockies Public Schools
Canmore Community Daycare

Community Foundation for Kingston and Area - Cameron Thompson Memorial Fund

**Cornerstone Theatre** 

École Notre-Dame des Monts

**Edmonton Community Foundation** 

Government of Alberta - Alberta Environment and Parks

Government of Canada - Employment and Social Development Canada

Government of Canada - Natural Resources Canada

Government of Canada - Natural Sciences and Engineering Research Council of Canada

The Grizzly Paw Brewing Company

Lafarge Canada

KCP Energy

Kodiak Wildlife Products Inc.

Rotary Club of Canmore

Rumi

Scat Belt

TD Bank

Town of Banff

**Town of Canmore** 

### **INDIVIDUAL DONORS**

Anonymous (1)
Ana Araúgo and Duncan Highsmith
Wes & Pat Campbell
Clint Cawsey
Sandy Lane

\*We are incredibly appreciative of all our supporters! Please note that only donations >\$1k have been listed here.







### 2022 REVENUE SOURCES\*



### 2022 EXPENSE BREAKDOWN\*



\*Based on unaudited financial statements for the year ending on 31 December 2022.

Amounts rounded to the nearest hundred.

### **IN-KIND SUPPORTERS**

Cornerstone Theatre
Goodearth Cafe
Panago
The Grizzly Paw Brewing Company

### **SILENT AUCTION DONORS**

Alpine Helicopters Inc.

Banff Kananaskis Constituency MLA Miranda Rosin
Banff Sunshine Village Ski Resort
Bicycle Café
Bow Valley Regional Transit Services Commission
Café Books
Canmore Nordic Center Provincial Park
Carter-Ryan Gallery
Drop Caramel Co.
Fairmont Banff Springs
Float Canmore Spa
Fraser-McGurk

John E. Marriott Wildlife and Nature Photography

Miles Tindal Ceramics

Of Cabbages & Kings Pottery

OnwardUP

Paintbox Lodge

Pedego Electric Bikes

Rocky Mountain Soap Co.

SkiUphill Inc

Stonewaters

**Strides Canmore** 

Switching Gear

Talus Lodge

Tank310 The Grizzly Paw Brewing Co.

The Co+Kitchen

The Iron Goat Pub & Grill

The Yoga Lounge

**Two Mann Studios** 

Wildlife Distillery

Wildrose Electric

Yuka Ozawa

### **OUR PARTNERS**

Alpine Club of Canada - Rocky Mountain Section Banff Isn't Disposable Bow Valley Builders and Developers Association Bow Valley Clean Air Society **Bow Valley Climate Action Society** Bow Valley Green Energy Cooperative Canadian Rockies Youth Network **Eco-Solar Home Tour Society** Government of Alberta - Alberta Environment and Parks Municipal District of Bighorn Parks Canada Roundtable on Human-Wildlife Coexistence Technical Working Group Tamarack Institute Tourism Canmore Kananaskis Working Group Town of Banff Town of Canmore

# SUPPORT THE BIOSPHERE INSTITUTE

The Biosphere Institute is a registered charity.

We are funded entirely through donations, grants and
contributions from the community.

To support us, please visit our website www.biosphereinstitute.org/donate

Or contact:
PO Box 8789, 201-600, 9 Street
Canmore, Alberta T1W 3L9

Tax receipts for donations are provided.

Charitable Registration Number: 889128625 RR0001





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