

# 2020 Sustainability Stories



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## Addressing the needs of vulnerable groups in northeastern Nevada

The Community Foundation of Elko County plays an important role in supporting vulnerable sectors of the population, and addressing their critical needs. Gifts to the Community Foundation of Elko County are permanently invested in an endowment fund, and the net income of the earnings are then awarded through an annual grant cycle to local community organizations. Programs supported by Bald Mountain include: improving literacy rates through the Wells Family Resource Center; providing highly-trained advocates for elderly residents through the Northeastern Nevada Special Advocates for the Elderly program; improving graduation rates of at-risk youth through Communities in Schools of Northeastern Nevada; and reducing poverty and improving family stability through the Nevada Legal Services program. In 2019 these programs benefited almost 1,500 people in northeastern Nevada.

The Wells Family Resource Center works to improve the literacy rate in rural Nevada through a collaborative program “Building Blocks to Literacy” that focuses on parents, community libraries, and early childhood classrooms and includes components for children, teachers and parents. With Nevada reading levels below average compared to the rest of the country, there has been a focus on getting children reading by third grade. More than 500 students, parents and teachers were served in 2019.

Northeastern Nevada SAFE’s (Special Advocates for the Elderly) mission is to provide highly-trained advocates for elderly persons in guardianship cases, many of whom are unable to do this for themselves and are at risk of physical and financial abuse. SAFE provides these vulnerable adults with caring volunteers, trained in the legal responsibilities of guardianships, who advocate for them through court

proceedings, and provide support with many everyday issues. Currently, there are more than 300 guardianship cases open in the Elko area and the courts are trying to bring these into compliance, with the oldest case dating back to 1971. SAFE has developed training programs, delivered classes, and in 2019 helped 15 vulnerable elders in guardianship cases in the Elko community.

CIS (Communities in Schools) Academy is an elective class offered to juniors and seniors most at-risk of not graduating. It has been in place since 2009 and currently has 79 students enrolled in the program, between Elko High School and Spring Creek High School. CIS ensures that classrooms are resourced for course completion and embeds trained site coordinators to address students’ unmet needs. Nineteen students in the CIS Academy program at Spring Creek High School achieved certification in First Aid (CPR) and the overall graduation rate of students in the CIS program was 97%.

Support from Bald Mountain allowed Nevada Legal Services to open a Resource Help Desk to provide low-income eligible residents with free access to legal information, legal forms, community information and referrals, and Nevada Legal Services attorneys for advice and/or court representation. In addition, the help desk provides services to Native American Indians and can deal with matters involving tribal law. Because of the transportation barriers in smaller, rural communities, having online access is very important. Animated online videos are being developed to make legal information more accessible to everyone, by breaking down barriers of language, culture, and education level. More than 160 people in the local area have been served by the Resource Help Desk.

## Supporting Western Shoshone Youth in Nevada

The Round Mountain mine has a long history of helping young Nevadans build their futures through gaining a solid education. The Round Mountain high school, supported in a variety of ways by the mine, has seen strong improvement in graduation rates in recent years, now at or near 100%. While overall graduation rates in Nevada improved to 84% in 2019, similar to the rest of the United States (85% in 2016-17), individuals of Native American descent in Nevada historically have had lower graduation rates (74% in 2019<sup>1</sup>).

Round Mountain is helping address this disparity through an approach which encompasses both school and college age groups among the Western Shoshone people of Nevada, specifically with school children at the Yomba Shoshone tribe and college students through the Kinross Western Shoshone Scholarship.

In 2018 and 2019, Round Mountain was a major sponsor of the Yomba Shoshone Tribe's Summer Youth Education Program. This program provides 10 weeks of summer education for nearly 30 Yomba Shoshone youth each summer, and employment for three tribal members. The curriculum focuses on cultural awareness and inclusion, as well as supplementing regular education such as reading and mathematics.

Before the summer program existed there would be a substantial adjustment period when students returned to school after the three-month summer break. Teachers observed that students who participated in the summer program were able to manage this transition better than those who did not. Also, they recognized improvements in student performance and attention span during the school year. Specialized survey questions showed that the program provided an increased sense of community and support, as well as increased teamwork skills.

Looking ahead, we are working with the Yomba community to improve internet access and bandwidth and ensure that children have access to the full range of virtual education opportunities that have been developed during the COVID-19 pandemic.

<sup>1</sup> [http://www.doe.nv.gov/News\\_Media/Press\\_Releases/2019/Nevada\\_Sets\\_Graduation\\_Rate\\_Record\\_for\\_Second\\_Straight\\_Year/](http://www.doe.nv.gov/News_Media/Press_Releases/2019/Nevada_Sets_Graduation_Rate_Record_for_Second_Straight_Year/)

*"Students have learned and demonstrated in the past few months following the Summer Youth Program an ability to remain resilient and see how resiliency is important within our tribal community. Students have been exposed to team efforts and have benefitted from being productive members within their groups; allowing for sharing and accepting of space with peers and others."*

**Danneka Smith**  
Program Director

Since 2007, Kinross has provided opportunities to Western Shoshone youth of Nevada to further their education at post-secondary institutions through the Kinross Western Shoshone Scholarship. In 2019, the number of undergraduate scholarships was increased from two to three, and one graduate degree scholarship was created. In 2016, the Bald Mountain mine, located in White Pine county, became a partner in the scholarship program.

Since 2017, three scholarship recipients have graduated from college. One of those was Brianna Millett, who received the scholarship for the full 5 years and obtained her nursing degree in 2019.

"Without the Kinross Shoshone Scholarship, I don't know if I would have been able to further my degree," said Brianna. "It is truly because of their contribution that I was able to finish and earn my RN." As a result of our increased engagement and support, all scholarship students report increased confidence, sense of community, and personal growth. More than 20 Western Shoshone youth have benefited from awards and there are currently 4 enrolled scholarship students, one of whom has started a Native American Club which has gained 10 members and engages with similar clubs across Nevada.



## Integrar – supporting a new approach to education in Paracatu

Through the Integrar Educação program, we have supported the public school system in Paracatu since 2011. For the first six years of the program, the focus was on direct support to students, but a strategic review in 2017 identified that, while students were benefiting significantly, sustainable benefits were not accruing to the schools and staff. This led to a refocus of the strategy towards teacher and school management training, coinciding with the publication in 2017 of the new national curricular base for Brazil for early childhood and elementary education, and the high school version in 2018. The State of Minas Gerais then published its reference curriculum, based on the new national curricular base. Paracatu schools must now upgrade their curricula to align with the new State and national guidelines.

The new curricular base refocuses the approach to education away from content-based learning to competencies, requiring that educators upgrade their skills and pedagogical strategies. Our dialogue with educators led to a new Integrar Educação teacher-training strategy implemented in 2018 and 2019 through partnership with the NGO Associação Imagem Comunitária, Mathema Training and Research, the Municipal Secretariat of Education of Paracatu, and the Regional Teaching Superintendent. The training consisted of teaching methods for Portuguese and Mathematics, and methodologies for active learning, for 120 school teachers from fourth to ninth grade, and school management classes for 41 public school managers from eight public schools.

The professional training was complemented by funding for youth projects, focused on improving social skills (e.g., collaboration, communication, openness, self-management, critical thinking and problem solving); 15 of these projects were completed.

With the realization of youth projects in the schools, teachers have the opportunity to work on student dimensions of identity and citizenship. Through participation in collective and collaborative initiatives aimed at solving real problems, opportunities are created for the student to expand their self-knowledge. Examples of youth programs include: urban art initiatives such as painting school walls, developing a school radio station, upgrading school facilities such as gardens, libraries and canteens, and thematic issues such as employability and bullying. All of the staff involved in the course reported that it improved their professional skills and connection with the education sector.

In 2020, the education training plan was suspended due to the COVID-19 crisis and refocused on a task force approach, known as “Integrate against COVID-19”. New actions included production of content for remote teaching and planning for eventual resumption of face-to-face teaching after months of absence. Content included: a radio program (Integrar Education about COVID-19), a student guide, and a manual for educators in the time of COVID-19.

In Brazil, fundamental school performance is measured by the IDEB score, measured in early and final years of schooling. For all public schools in Paracatu, the average IDEB score in 2017 was 4.3. Considering two schools which have been in Integrar since 2011, one (rural location) has a score of 4.6 and the other 4.3 (urban location). While the context of each school is different and IDEB only measures proficiency in Portuguese and Mathematics, we will continue to track IDEB scores as a basic measure of a school’s performance.

MAKE A POSITIVE CONTRIBUTION

## Working with youth to promote Paracatu's culture

Youth have great potential to contribute to the cultural life of Paracatu. With this in mind, we started the "Network for youth culture and protagonism" with 30 youth who have designed and implemented a program called "Expressarte Paracatu". The program includes dialogue on the meaning of culture and heritage, creation of a cultural guidebook with associated media, and a calendar for youth cultural events in the city. The youth were able to develop an understanding of the importance of the intangible cultural heritage of a community and its relation to social structures. They conducted interviews, field trips, and photography to build the cultural guidebook, including a calendar of 10 events. All the youth who participated in the program felt that it helped improve their self-confidence and 90% said that the project allowed their voices to be heard. This cultural network has been complemented by another youth program, Carçoço TV, in which 150 students from 10 schools have learned about audio-visual technology, producing more than 20 videos seen by thousands of people in the city.

*"Young people do make a difference and we call on everyone in Paracatu to help value the culture of our city."*

**Youth Participant**

The Quilombola community of São Domingos is one of Paracatu's great cultural strengths. One of the most successful initiatives of the youth cultural program was "Get to know São Domingos," which helped provide visibility to the culture and traditions of the Quilombola community through local television and media, leveraging events such as the annual "Caretada" dance festival in honour of St. John the Baptist. Also, in 2019, we worked with the Cultural and

Education departments of the Municipality to run a program in which more than 1,000 school children in 42 groups, visited Casa Kinross and the community of São Domingos. In São Domingos, all 42 groups visited the home of Aureliano, a 108-year old Quilombola resident, to learn about his life and traditions.

*"When others come to join us, it strengthens us, motivates us and we feel welcomed and not forgotten. I have been here, as a leader, for eight years and I see how much the community has grown and improved through projects and partnership."*

**Irene dos Reis**

President of the Quilombola Association of São Domingos



## Improving community health outcomes at Chirano

Chirano has taken an integrated approach to community health, building community health and sanitation infrastructure, supplying equipment and supplies, conducting wellness missions, and implementing community waste management. This strategy is implemented through close coordination with District health authorities.

We have built and improved five CHPS (community health & planning services) compounds in the catchment area, handing these over to the Ghana Health service, which staffs and maintains the facilities. Numerous studies in Ghana have shown that the main limitations to rural health care access are distance from a facility and poor roads. The CHPS compounds, together with road maintenance by Chirano, ensure that communities can access local care and district hospitals.

Working with staff from the CHPS clinics, we conducted wellness programs in the past two years including:

- Cervical cancer screening for 1,200 women within the mine catchment area, including employees.
- Eye screening in partnership with Third Eye Care and Vision Centre from Accra. More than 1,800 school children and adults of all ages were examined. 46% showed some degree of presbyopia (mostly among middle aged group) and 35% had conjunctivitis (mostly children); 12% had cataracts, predominantly among the elderly. More than 500 pairs of glasses and 2,300 eye drop kits were distributed.
- World HIV/AIDS Day: 400 people were screened
- Diabetes screening for more than 1,200 local residents. Nutrition advice was provided.

After the screenings, anyone requiring a further appointment was given a referral at the hospital in Wiawso or Bibiani.

Baseline studies and perception surveys have identified waste disposal as an important issue in the

catchment area (and in Ghana in general). It is common practice to incinerate waste in the open air or to dispose of it directly in the environment. Communities have by-laws governing waste disposal but in practice many people are unaware of these laws and in any case do not follow them.

To address this problem, Chirano in 2016 contracted Zoomlion Ghana to implement waste management services in Akoti, Etwebo and Paboase communities. The service includes six skip waste containers, collection and transportation from the refuse site, and final disposal at landfills. A survey of 80 community members in the three communities was conducted in 2019 to determine the results of this program. Prior to the arrival of the skips most people disposed of waste in community waste pits, behind their homes, or at the roadside. Over 90% of the community now use the new waste management system, expressing that it helps keep their communities clean (95% noted this as a benefit) and prevents the breeding of mosquitoes.

Ongoing challenges include the need for continued awareness on sanitation and the need for smaller waste bins distributed around the villages to facilitate easy waste disposal. The small percentage not using the system were generally those who live further away from the skips. Further dialogue with village Chiefs and community members will consider methods to ensure the long-term sustainability of community waste disposal, especially after eventual mine closure.

Effective sanitation is a key part of community health. Chirano has completed construction of public toilet facilities in eight communities, almost half of the villages in the catchment area. We work with village elders and community members to ensure that a community-based system is implemented to look after the facilities. Experience has shown that this is critical to encouraging use, and reducing use of other methods which create health risks, especially for children.

## Improving well-being through provision of grid electrical power at Chirano

In Ghana, 67% of the rural population has access to electricity vs. 94% in urban areas (World Bank, 2018 data). In 2004, when the Chirano mine started, the rural electrification rate was just 28% and most of the immediate villages were not on the National grid.

With the development of the mine, a power line was brought into the area and between 2006 and 2009 most local villages were connected to the grid, but the villages of Kwawkrom and Kwanikrom remained off the grid. In early 2016, Chirano contracted a local engineering company to connect Kwawkrom to the National grid and, in 2019, through a partnership with the Nexan Foundation, Kwanikrom was connected as well.

In a survey of Kwawkrom community members, the following impacts of not having electricity were identified:

- Theft due to dark streets;
- Lack of entertainment;
- Requirement to walk to neighbouring villages to charge mobile phones;
- Harder to maintain contact with family and friends in other towns;
- Fumes in homes due to use of kerosene lamps; and
- High turnover of school teachers.

Sixty percent identified that these factors had a negative impact on quality of life. Following connection to the grid, more than 80% recognized a very significant improvement in quality of life, through mitigation of the negative impacts combined with positive benefits such as establishment of new businesses (e.g., retail stores with refrigeration capacity, communication centre, and sewing establishment).

In addition, the availability of lighting has allowed children to extend their study hours in the night, freeing up daytime hours for other activities. Similar to other local villages, cooking is still done principally with wood since this is locally abundant and cheap. Almost everyone (94%) indicated their satisfaction with living in the community.

Following connection to the grid for Kwanikrom, the Nexan Foundation has committed to providing a corn milling machine once electricity meters have been installed in the community. By the end of 2019, 100% of the 20 communities in the catchment area were connected to the National electrical grid.

## Establishing a Community Foundation at Chirano

Chirano Gold Mines Ltd (CGML) committed from 1st January 2006 to accumulate US\$1 per ounce of gold produced for a community fund, known as the "Trust Fund". Until 2018, these funds were accrued on CGML's books but were then placed in a separate interest-bearing US\$ denominated bank account. Until the end of 2019 \$2.1 million was held in the account, with \$0.94 million having been disbursed prior to 2014. No disbursements have been made since 2014.

CGML and the CCC (Community Consultative Committee) wanted to ensure that the accumulated funds would be used for projects that provide genuine benefit to the community, with appropriate governance standards and controls. To that end, discussions began in 2017 around the best way to use these funds. We incorporated learnings from the Kupol Foundation in Russia, which in 2019 celebrated its 10th anniversary, and we engaged with peers in Ghana which have set up community foundations. At the July 2018 CCC meeting, agreement was reached with our stakeholders to proceed with the constitution of a Foundation.

We engaged an expert consultant from the region to manage a consultation process with all communities in the catchment area, identifying their priorities for the foundation and obtaining comments on the draft charter. The charter was developed by a working group, composed of local legal experts and Kinross representatives. A final version of the charter was presented at the CCC meeting on January 20, 2020 where it was approved by the assembled chiefs and other members.

The Board of Trustees will be composed of nine members, two of whom will be designated by CGML (i.e., the Chairperson and one independent member from the community), two by the local communities, three (one each) by the three Paramountcies, and three (one each) by the two district assemblies. Post mine closure, CGML will withdraw from the Board, which will then be composed of seven members only.

Additional consultation was undertaken with communities regarding their nominations for the first board of trustees. An executive secretary, from the local area, was hired following a selection process. The Foundation was formally launched at the July 2020 CCC meeting.

Following registration of the Foundation and its Board of Trustees, the first Board meeting will be held. An immediate priority is to establish the "Chirano Sefwiman Foundation Scholarship Scheme," for which a protocol and application procedure has been developed.



MAKE A POSITIVE CONTRIBUTION

## Empowering women through skills training and small business development in Mauritania

Tasiast has engaged with women in the local community for many years, helping establish a local cooperative in 2011 and employing some at the mine, either directly or through contractors. Despite these efforts, unemployment rates are higher (58%) among local women than men (23%), based on our 2017 socio-economic survey.



We consulted with local women to identify additional opportunities for generating jobs and income, resulting in a project to train women in sewing. In the first phase of training, seven women completed a program through partnership with a women's training center in Akjoujt, the capital city of Inchiri. They were given work by Tasiast to repair and improve work uniforms. Subsequently, a second group of ten women completed a training course at the Centre de formation et de perfectionnement professionnel / Center for Professional Training and Development (CFPP) in Nouadhibou, through the training agreement established between Tasiast and the CFPP for youth skills training. In an evaluation meeting with the 17 women, they demonstrated a strong spirit of

cooperation and willingness to train others who had not been able to participate. Following this meeting the women set up a shop in Nouadhibou, and now have diverse clients in the city, including schools which have ordered uniforms.

In 2020, as part of Tasiast's program to manage the spread of the COVID-19 pandemic and following a successful trial order of 200 masks to ensure that the material, design, and quality complied with health and safety requirements, the mine placed an additional order for 2,000 face masks, followed by another 2,000.

*"We do really appreciate this project and are very thankful to the company. More than the money, we are very happy to see that the company is satisfied by a local product we've made."*

**Member of the Women's Cooperative**



MAKE A POSITIVE CONTRIBUTION

## Opportunities for youth from skills training at Tasiast

While overall unemployment in all zones around Tasiast has fallen from 59% in 2011 to 29% in 2017, the youth population (those from 15 to 34 years old, representing about 30% of the population) has generally lower education (less than 40% have completed secondary school in any zone) and skill levels.

In addition due to the Mauritanization program, Tasiast places a high priority on skills training for local youth, opening opportunities either at Tasiast or in the general job market. We developed a skills training program in partnership with the CFPP (Centre de formation et de perfectionnement professionnel / Center for Professional Training and Development) in Nouakchott and consulted with local authorities regarding the selection of youth from different communes around Tasiast.

The agreement was signed between Tasiast and the CFPP in December 2018, covering a three-year period and training for 240 people. In 2019 one hundred young people, including 14 females, from neighbouring communes completed training modules in Automotive Mechanics, Metal Construction, Industrial Electricity, Plumbing, General Masonry, and Air Conditioning. A survey carried out by the CFPP in February 2020 with a group of 24 trainees, found

that 87% of those interviewed had a job opportunity following the course and were more open to additional training; 66% felt more self-confident and more comfortable working in a team. Two young women who completed the training program, obtained certificates in mechanics and industrial electricity, respectively. They were motivated to participate since it was made clear that there were equal opportunities for men and women, and stated: *“Nothing prevents us from finding a job in a large company.”*



## Mule deer adaptive management at Bald Mountain

Bald Mountain maintains an adaptive management program to ensure mule deer are able to successfully migrate along corridors through the mine property, since the Area 10 mule deer herd (one of the largest herds within Nevada) utilizes the mine area as a transitional habitat between winter and summer ranges. Data that the Wildlife Working Group, Bureau of Land Management (BLM), Nevada Department of Wildlife (NDOW), and Kinross, have collected over the past three years confirms that these corridors are successfully supporting migration.

A Mule Deer Monitoring Plan was developed in collaboration with the BLM and NDOW to measure the effectiveness and success of reclamation activities and adaptive management options to support mule deer migration through the mine property. As part of the monitoring plan, at least 30 mule deer have been given radio collars so that we can track movements and patterns over time, potentially helping determine if there are behavioural responses to mining activity. Annual monitoring data is collected, compiled, and reviewed by the Wildlife Working Group at the end of each migration season to assess the effectiveness of the mule deer migration corridors and protection measures.

Any new land disturbance within designated mule deer migration corridors is reclaimed as soon as the activity in the area is complete. Bald Mountain performed concurrent reclamation activities on approximately 647 hectares of land disturbance from 2014 to 2019 and approximately 2,100 acres are in various stages of reclamation.

Additional specific components of the plan include:

- Backfilling of sections of some pits to allow for mule deer movement through the area;
- Ensuring maximum slope gradients of 2.5:1;
- Blending and shaping of mining features to match the surrounding topography; and
- Leaving islands of native vegetation intact.

Bald Mountain will continue to participate in mule deer monitoring, annual assessments, and further reclamation activities, to accomplish one of its key post-mine land use objectives.

DO NO HARM

## The Acqua Project at Paracatu

Our Paracatu mine is located in one of Brazil's largest agricultural regions where water resources are of high value to all stakeholders. Over the years, the area has experienced periods of drought, which have contributed to occasional production curtailments at the mine and heightened the potential for stakeholder conflict over water resources.

To help mitigate the risks arising from drought, Paracatu initiated the Acqua project in 2016, consisting of 13 groundwater production wells, one research well, and 37 piezometers for monitoring of water levels and movement. The goals of the project were to diversify water sources to ensure sustainable operations; reduce the need to use water resources relied upon by local farmers; and, mitigate the risk of any negative environmental impacts through extensive studies and ongoing monitoring.

The Acqua Project began with preliminary studies in the area of São Domingos and São Pedro creeks where the mine draws most of the fresh water to support operations, approximately 15 km from the mine site. Further research focused on the potential for groundwater resources within karst terrain that is close to the operation. Initial observations of the water table and flows showed little seasonal variation even during the dry season.

The Acqua project is located in farming areas within the karst terrain and is surrounded by densely vegetated hills to the east of the mine. The area is important for its flora and fauna, natural cave systems, and the farming community. Throughout the life cycle of the project, mitigating potential impacts and protecting the natural area remain ongoing priorities. Drawing upon hydrogeological research, piezometer results and other regional studies, a Key Performance Indicator was identified to allow for safe pumping of groundwater wells within certain absolute and relative variations.

We developed a hydrogeological model for the area which provided insight into potential water variations over a five-year period, allowing us to adjust pumping rates at the borehole field to avoid impacts to the Santa Rita Creek. Cavity monitoring has informed our understanding of these sensitive environments and the hydrological dynamics of the lakes in cavities and their relationship to other elements in the same environmental system.

In addition, we implemented a detailed risk analysis of the potential for land collapse in karst areas, considering natural and man-made processes. Boreholes located in higher risk areas are monitored daily. We maintain close engagement with the small community of Cunha, adjacent to the borehole field and have repaired the community borehole and pump, which draws from the same aquifer. The community now has a stable water supply, whereas previously it occasionally relied on water trucks.



DO NO HARM

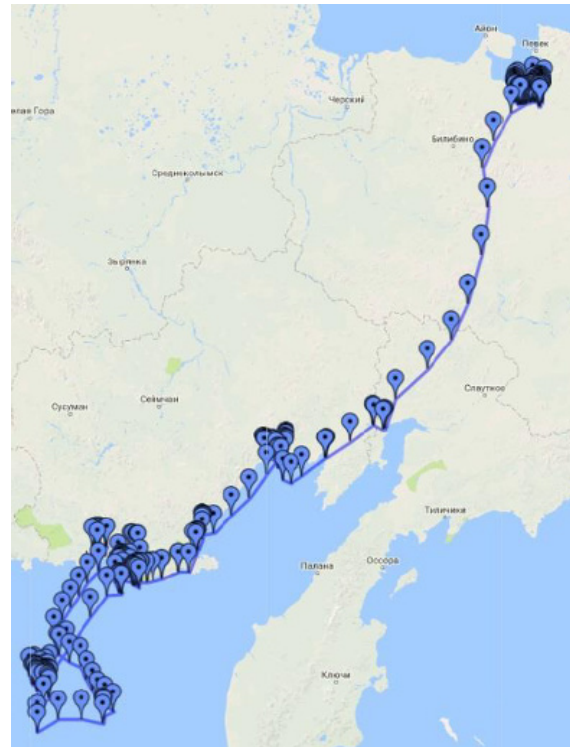
## Understanding the impacts of climate change on bird life in the Russia's far north

The Chaun research station of the Institute of Biological Issues of the North and the Far Eastern Branch of the Russian Academy of Science, was established in the early 1970s to study local biota, including cataloguing avian fauna and breeding habits. Following a gap in the late 1990s to early 2000s when no research was possible, in 2010 Kinross began a strategic relationship with the research group, helping to repair the Chaun research station, and providing equipment, food, and transport for the researchers.

Tundra ecosystems are sensitive to the impacts of climate change since even small changes can affect avian breeding patterns and impact survivability. The Chaun station's detailed biotic records from the 1970-1980s provide a benchmark to compare with modern data, furthering our understanding of the ways in which climate change affects birds' arrival times and nesting schedules, and the northward migration of bushes, shrubs and predators.

With a stronger logistical base in place, the research team has launched a study called "From the Chaun Tundra to the Big World: Atlas of Bird Migrations in Western Chukotka," investigating global migration from bird nesting grounds in the station's neighborhood to winter locations all over the globe. Modern technical devices include light-level geolocators, GPS loggers, and GPS/GSM transmitters, which are fixed to birds' bodies to track them in flight.

In the US-Russian project Conserving Birds in Arctic Beringia: Addressing Climate Change Impacts to Shorebirds and Waterfowl through a Bilateral Research and Conservation Network, a project to trace migration of willow warblers, researchers used geolocators to track the migration of willow warblers (*Phylloscopus trochilus yakutensis*) from the Chaun Delta to wintering areas as far away as sub-Saharan Africa. Tracking of the glaucous gull shows migration from Chukotka to wintering areas in the Sea of Okhotsk (see map).



Expeditions to the Rauchua river basin, in the Ilirney mountain range, provide a good example of the importance of multi-decadal observations; this area had been affected by placer mining until the early 1990's. In 1993, researchers went to the site hoping to study the recovery of the local ecosystem, especially its "top" echelons - birds and animals, but found little of interest. In 2010, however, the ornithology research team spotted a flock of lesser white-fronted wild geese, a very rare goose species listed in all the Red Data Books: those of Chukotka, the Russian Federation, and the International Union for Conservation of Nature (IUCN).

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A follow-up visit in 2011 found the same population of the lesser white-fronted wild geese, including several thousand young chicks, meaning that breeding and hatching was happening at this location. The breeding proved to be a part of regular pattern of the species' behavior, rather than a random single-season phenomenon. Repeated helicopter trips in 2014 and 2018 showed that the Rauchua river breeding population of the lesser white-fronted wild goose was the largest settled population in Asia. Over 500 birds of this type inhabit the Rauchua River, remote from local rural communities.

As well as publishing research results in international scientific journals, the researchers have participated in community events organized by Kinross, such as the "Eureka" educational festival in Magadan, helping

to ensure that children become aware of the natural environment and its response to human intervention and climate change. In addition, Magadan university students are able to participate directly in the research program through summer internships sponsored by Kinross. This provides them with a unique opportunity to experience modern research methods, collaborate with international students and researchers, and experience the remote regions of the north.

*"We had a rare opportunity to improve our English and collect first-hand data for our diplomas and course papers. And of course, we have cherished memories and impressions of the Arctic where silence is broken only by the voices of migrating birds."*

**Participating Student**

## Strengthening governance in Colla communities in Chile

The underlying objective of a set of voluntary agreements, established in 2015 through the community participation process related to Coipa Phase 7, is to support Colla communities in the realization of their own development goals, ensuring sustainability and resilience. This requires strengthening of community governance. During the past two years we have worked together on community visioning, capacity building, and awareness of indigenous affairs.

Although working tables with each community have been in place since 2015, we have now established participatory workshops at which management tools were incorporated, helping to build skills in planning and organization, complemented with specific computer training. The scope of the participatory workshops includes budget assignment, so that available resources can be allocated to projects prioritized by the community.

This process has led to important outcomes for the relationship between Kinross and the community, with 100% of community leaders attesting to a more horizontal relationship with the company, in other words an equivalent balance of power. 95% believe that the transparent and participatory decision-making processes have developed trust and closeness with Kinross, and that the programs will improve the well-being of the community. The visioning exercises resulted in completion of culture and patrimony development plans by three communities. These plans were formally presented to regional and national authorities and diplomats from the Embassy of Canada in Copiapó in July 2019.

Other key initiatives supporting stronger governance include:

- **Improved awareness of indigenous affairs:** community members participated in international-level events, visited museums in Santiago to gather information about Colla culture, and traveled to Argentina to meet with Colla communities.
- **Recovery of Colla culture:** following a search throughout the region to find an existing model of a Colla loom, three were rebuilt and are being used for production of Colla textiles, an activity in which almost 30 community members are involved.
- **Environmental competence:** communities need to have sufficient knowledge of environmental matters to be able to effectively monitor the La Coipa project. More than 50 community members have received training in water, air and other monitoring components together with basic elements of environmental law and 10 have been specifically trained as community environment monitors. At least eight participatory water monitoring programs have been done with results delivered to the community.

During 2019, members of the community visited the La Coipa site to understand the environmental remediation systems in place. This training, combined with the community's ancestral knowledge of the region, has been of value to ongoing baseline studies for the nearby Lobo-Marte project. In this project, community members have participated in baseline work with the environmental consultants and have trained them in Colla ancestral knowledge of the land and its characteristics.

## Paracatu Downstream Communities

The areas downstream of the two major tailings facilities at Paracatu, Eustaquio (active) and Santo Antonio (ongoing reclamation) are comprised of farmlands with small villages and farmhouses. The population of this area is approximately 1,200 individuals.



Within the past four years, we have implemented two major emergency simulation exercises with local communities, completed technical and socio-economic baseline studies, opened a new central tailings management centre, installed emergency sirens, and received more than 3,000 visitors to the Paracatu mine site, including the tailings facilities.

These visitors include community leaders, local authorities, media, and others. Our tailings management centre provides 24-hour monitoring of our facilities through video and hundreds of instruments installed on and within the dams, and contains a dedicated room with documents and records available for inspection by regulators. Our

most recent perception survey indicated that 91% of the Paracatu population is aware of our tailings facilities, with 55% expressing confidence that we are managing them safely. In 2019, Kinross held its second emergency simulation exercise with the villages of Lagoa Santo Antonio, Cunha, Santa Rita, and Machadinho, held in coordination with Civil Defense and other local authorities. Planning started in December 2018, with bi-weekly meetings and training of 26 community coordinators. Presentations were held in each of the villages in July and the simulations were held in August with a total of about 30 to 50% of the population of each village participating.

*“My feeling is one of safety. Of course, it can happen, anything can happen, even an act of nature or something like that. I am not a technician or anything, but when the Brumadinho dam broke, Kinross spoke out and explained how it kept its dams safe. From what they showed you, you could believe what they said.”*

### Opinion Makers

