



Compiled by  
Dr. Gregory Rasmussen  
Painted Dog Research Trust  
Sizinda, Box 285, Victoria Falls  
greg@painteddogresearch.org

## **PDRT Annual Report 2021**

### **Welcome to Dog Tails from Painted Dog Research Trust.**

#### Message from the Founder/CEO

As for everyone, yet another rollercoaster of a year with COVID dominating the platform. Happily, here in Zimbabwe, there has been a very responsible attitude and approach to social distancing and well-timed and enforced lockdowns. Even better and much to our delight, early in the year, vaccines were available for everyone, with mobile and centers across the country, to include outside supermarkets. A job well done, and to keep it that way, masks are mandatory and we are all still having our hands sanitized and temperatures taken when entering shops and going to meetings.

All the arms of PDRT have been busy, with our education program curriculum being diversified and continually made more hands on, and our 'Kids for Science' curriculum is being continually elevated and we are delighted to have introduced an elephant encounter with the children. Consequently, as it is a PDRT mantra, never to dumb down to children with terminology, but rather empower them with new vocabulary which they seem to relish significantly more scientific vocabulary is 'coming out of the mouth of babes' as the saying goes.

With Climate change, habitat degradation and loss being a major threat to all conservation initiatives, to include Painted Dogs, we are delighted to be taking a role here and a long-term goal to build a research arboretum, and sustainable water supply has been achieved. In the same vein we also have initiated a pilot project to harvest and compost invasive/exotic ecotoxic plants with the long term goal to secure better habitat and develop an income generating project for rural women who due to COVID are struggling more than ever.

With speeding and careless motorists ensuring that Painted dogs packs having taken a serious knock over the last number of years we have made this a focal issue and have been busy with stakeholders to mitigate this threat that currently ranks as the number one direct threat to Painted dogs in the study area even outstripping poaching.

Finally, and on a very positive note, we were ecstatic to find out the fate of the musketeer pack and in particular the fate of the five pups, that through in-situ feeding of the pack, we saved from starvation. After an 18 month wait in mid-August, MK and the student research team came back from the field, beaming that not only had two of the camera traps had captured the Musketeer pack. and that there were at least eight adult/yearling dogs and five 14 week old pups. Scrutiny of the yearlings revealed that at least four out of the five pups we had worked so hard to save had survived. We say at least, as not all dogs present themselves to the cameras in such a way that we can be sure their identity. The pack subsequently disappeared again and hopefully not for 18 months. As our supplementary feeding program was a first, and demonstrated that the usual solution of digging pups out of the den to "save them"

## Summary of 2021

The year began well following amazing rains, that brought with it a crop of beautiful bluebells and butterflies, hitherto not present on the PDRT property or surrounds. With an ever-increasing species list our mission to create a model island of biological endemism is at the PDRT site, is indeed getting there. For example, bird species' that numbered three in 2014 and at the end of 2021 an impressive 81 species had been recorded !

Due to COVID for the first seven months of 2021 schools were not open, and when they did, many teachers were absent. In an effort to fill this void, as long as we kept the groups to less than 15, we were able to bring children to PDRT where Zulu focused on a lot of outdoor teaching to focus on the elements of our conservation education lessons that not only most tightly integrated with the school curriculum but also targeted those in grade 7 and form 4 that would have final national exams in 2021.



As it was not only our local schools that were shut, in May and with cultural exchange in mind, thanks to Alex Lenski, via Zoom we brought together 29 4<sup>th</sup> to grade children from Sizinda Primary with 35 and 4<sup>th</sup> Graders (and parents) from Heights Academy Washington DC. This was under the umbrella of a KIP (Knowledge Is Power) program in the US. Here over 5 weeks the two classes shared their worlds and learned about Painted Dogs their conservation biology and challenges.



In March, fieldwork rains finally subsided, and camera trapping continued in earnest. Apart from getting long term data on all species, the main objective is to get a handle on which painted dog packs are where, and record of their survival. We had reports that the Stoffel's pack numbering three dogs was alive but spending more time in Botswana, but other than that no reports of painted dogs. This *status quo* remained until August when the Musketeer pack was found with its five new pups the situation looked bleak. Happily later in August, another pack was located, also with pups, and also the camera traps revealed a fourth pack.

limiting



As the near demise of the Musketeer pack and pups was precipitated by vehicles on the Falls Kazangula road, following meaningful discussions with National Parks and the Police, on the happy understanding that we can provide financial and where necessary logistic support, we were delighted to get full sanction for a collaborative Wildlife Traffic Collision mitigation plan for 2022.



Also, in August finally we managed to finish building an arboretum with the specific goal to not only assist mitigate habitat degradation and loss but to undertake solid research to understand what factors were contributory to successful planting. With the impacts of climate change and habitat loss being blatantly apparent this has been a long-term dream as understanding the challenges is vital to success. Sadly, an appalling statistic pertinent to tree planting initiatives is that nationally, >99% of trees that have been planted in the past for the purpose of ameliorating habitat loss and climate change do not survive. Consequently, aside from research by Loswitha Murugani (who is a student attached to us and now working to understand tap root growth and later soil microbia), over the Christmas holidays, Loswitha and I planted the first ever Miyawaki pocket forests in a semi-arid degraded African landscape. We were also proud that Loswitha got the Danforth Trust grant to support vital equipment for her work.



Being her first grant for her research, naturally, Loswitha was ecstatic.

Also, on the climate change front, late 2021, thanks to the French Embassy in Harare, we initiated a complementary pilot project namely the harvesting of invasive exotic species, that are poisoning fields and making them unusable. Overall, the objective is to convert these ecotoxic plants into marketable compost. This removal, will simultaneously enhance habitat quality, and resilience, whilst at the same time hopefully long term, developing an income-generating opportunity for women. Our dream here is that if successful, it is hoped that this can become a woman driven, environmentally friendly, and financially sustainable habitat utilization model for rural communal lands.





Happily, all this this work is providing additional employment for the local community, and dovetails neatly with the Kavango Zambezi Transfrontier Park initiative (KAZA) vision which is to undertake bold innovative approaches to garner community engagement/support, create environmentally sustainable projects and in tandem maintain & reinforce habitat connectivity. In short, we believe that the long-term success of our project vision will be ensured by the following. 1/ Ensuring that science/research-based monitoring remains as the guiding light 2/ Inclusion of communities and development of meaningful community-based projects that remain firm to our adoption of the ‘*qui bono*’ principle that both the ‘*environment and the community equally benefit*’. 3/ Build for the future of conservation by targeting youth, (defined as <30 years old) to incorporate conservation education, training and educational empowerment from primary school to PhD.

Last but not least, and with education in mind, we are happy to report that whilst our Children’s bush-camp dream to build a live-in bush camp to facilitate children to come for a conservation immersion experience is not complete consequential to COVID lockdowns and a major donor being forced to withdraw, we did complete all the 20 rondavels , beds and desks and more. These will house a maximum of 30 children staff and community member participants. We also completed a storeroom and partially completed the dining area. Importantly, we finished a safe stairway down a steep hill to the bush camp which apart from providing access, as rural children have never seen stairs, it’s a great hit with the children who love using it when undertaking bush camp program activities which are operational, just not live in yet!.



Head of education Zulu delivering conservation education at the PDRT Bush Camp to be.

## **Research Report.**

Highways, and in particular the Vic Falls to Kazangula highway, remain a singular threat that has functionally extirpated painted dogs in the Matetsi Hwange dispersal corridor to the point that the KAZA recognized has no conservation value for painted dogs. This supposed safe corridor, therefore, holds no conservation value for painted dogs as it represents a population sink and thus will be impacting the potential source population in Hwange National Park. With the estimated carnage across vertebrate species being some 4000-6000 annually, it is a fact that it is not only painted dog survival that is threatened.

With the inclusive 2013 to 2020 data highlighting the magnitude of the Wildlife Vehicle Collision (WVC) problem following significant meetings with Parks and ZRP Victoria Falls, a collaborative WVC mitigation Strategy was developed to include components strategy to include the following.

- 1/ Implementation of static roadblocks at both ends of the Victoria Falls to Kazangula Road.
- 2/ Development of speed trapping devices that will not only calculate the average speed between roadblocks to an accuracy of <1 km/h, but be so robust as to withstand any challenge in court.
- 3/ Erection of Road under Surveillance Billboard
- 4/ Development of docket book where WVC's can be reported
- 5/ Erection of Poster at borders highlighting the problem.
- 6/ Undertaking strategic camera trapping to not only get data on wildlife activity periods, but also to detect illegal activities including poaching and smuggling.
- 7/ Production of a handout flyer highlighting the problem.
- 8/ You are entering a wildlife area slowdown billboard.
- 9/ Production of slowdown bumper stickers.

## **Education**

In Zimbabwe as in many other countries, the first school term started late but by using our conservation education team of graduate and undergraduate students, we supported the rural school system struggling to make up for lost time and staff. We also focussed in the last term to assist those in their last year at primary and secondary school. Consequently, a total of 68 days were devoted to in school teaching 2646 children. At PDRT base, we had children on site for 46 days (636 children days with 47 children completing Bush camp/Kids for science activities over three different days (495 individual children total at PDRT outing days that also received lessons at school). These activities included visits to Forestry and a new immersive elephant encounter initiative. Here the children not only get a full elephant conservation and behavioural ecology lesson, they then have an elephant encounter and with elephants. Adding value is that our elephant dung interactive program is now in-situ and this integrally linked what is a first provincially within Zimbabwe, namely our indigenous tree research arboretum. Another first anywhere in Zimbabwe at least, is a composting project that is exclusively for women, and targets the removal of ecotoxic, invasive exotic species. These two projects provide a perfect full-cycle link for the children to participate in namely : From herbivore/elephant ecology > dung > seed dispersal > facilitated germination > soil bacteria > compost > to arboretum > afforestation > its role in climate change, and all the associated research.





## Targets and Dreams for 2021

Complete the Children's bush camp and have the first intakes.  
Complete Construction of a Student Dining/Recreation/lecture centre where workshops can be better facilitated.  
With funding we also wish to take the conservation ecology centre to the first-floor level.



So, to conclude.... Special thanks to the PDRT team for their commitment, to the community they serve, and of course ... the Painted Dogs and Bongo!

*We know times are tough for everyone, but if you can consider supporting know it will go a long way*

*Please support at  
<[www.wildnet.org/pdrt](http://www.wildnet.org/pdrt)>*



*Importantly PDRT continues to be grateful to the individuals and organizations who choose to advance our infrastructure, education and research programmes through their generous contributions as well as the local organisations that help us logistically, the companies that deliver good service and try to assist us ensure that our funds raised go as far as they can go.*

*We know times are tough for everyone, but if you can consider supporting know it will go a long way*

## **Special appreciation:**

AAZK Milwaukee Chapter Household, Aggie Pagnillo Household, Al Gilbert Household, Alex Lenski, Alisha Ebling, Alison Nicholls, Amy Young Household, Andrea Ewald and Stephan Meyer-Ewald, Anil Kripalani Household, Anonymous donor, Barbara and Rob Dicely Household, Barbara VanHecke Household, Bonnie Beaudoin Household, Brandon Davis, Brenna Craft Household, Bri L. Household, Brittany Ackerland Household, Brittany Tommila Household, Carlos E Figueroa Household, Carol Kendle, Colin Ma and Laurie Christensen, Colin Ma and Laurie Christensen, Columbus Zoo and Aquarium, Dan Welcheck, Danielle Velonza Household, Danforth Trust, Dara Kelly, David Rogoff Household, Delores Odell Mccollum Household, Department of National Parks and Wildlife Management Zimbabwe, Disney Animal Kingdom, Ed Buns & Michael Kreger, Eileen Flynn, El Paso Zoological Society, Elizabeth Scatchard, Elske Fehl-Weileder, Endangered Wolf Centre, Erin Krueger, Erin Swilley, Forestry Commission Zimbabwe, Forestry Commission Zimbabwe, French Embassy, Greater Los Angeles Zoo Association, Guy Oliver and Patricia Morris, Hans Green, Harriet Allen, Harry Ulmer, Hollie David, Ishmael Generator Service Victoria Falls, Jack Randall, James Danoff-Burg, Janet Campbell, Jeannette Schwab, John and Audrey Ruggieri, Judith Pickersgill Household, Judy Baker, Julia Maltzan and Henning Weisner Academy for Zoo and Wildlife, Justin Birkhoff, Karen and Gary Winnick, Kathy Gervais, KAZA Zimbabwe office, Kelly Wilson Household, Knoxville Zoo, Kristin Wagner, Linda Tabor-Beck, Living Desert Zoo and Garden, Living Desert Zoo and Garden, Los Angeles Zoo, Lowry Park Zoological Society of Tampa, Made In The Wild, Maggie Sperkowski, Mark and Becci Crowe, Mary & Emily Thomas, and the living Desert Zoo Volunteers, D, Mary Anne Lefevre Household, Mary Renaker and Eric Brazel, Morgan Stanley Match Gift Program, Natural History Museum Zimbabwe, Niabi Zoo, Nicole DeGennaro Household, Nicole Hill, Nikky Vivian-Robinson, Oklahoma City Zoo, Oregon Zoo | Metro, Oregon Zoo Beth Foster & Roger Williamss, Patt Poinsett-Nalley Household, Pia Anderson Household, Portland Chapter of AAZK, Quad City AAZK, Rhode Island Zoological Society, Richard Smith Household, Rob and Barbara Dicely, Roblox Match Gift Program, Rose & David Dortort Foundation, Ruta Rakutis Household, Ruth Hall Household, Sacramento Zoo, Sandra Miles Taylor Pearce, Sandra Visse Household, Sarah and Mark Mawadzure - Smith, Sarah and Roger Friedel, Sarah and Roger Friedel Household, Sarah Devine, Sedgewick County Zoo, Sheila Broadley, Sleep Tostanoski Household, Stacy Graison, Steve and Molly Attell, Steve Flaherty, Sundance Solutions, Susan Janin, Susan Trippi Household, Tammy Cloutier, Tara Stoinski, The Walt Disney Company, Tim Partee Household, Timken Company Charitable Match Gift Program, Tina and Erik Mickiewicz Household, Ulrike Beckmann and Family, Valerie Face, Victoria Jacobson, Vincente Tellez, Walt Disney Corporation, Weston Popichak, Wild Cat Education and Conservation Fund, William Bonnar, William Ebling, William Sterritt Household, Windy Inthavongdy, Yorkshire Wildlife Park, ZEWACT Elephant encounter, Zimbabwe Republic Police, Zoo Knoxville, Zoo Tampa.