



## **AERIAL MONITORING IN THE LOWER ZAMBEZI**



**ANNUAL REPORT 2015**



Aerial patrols remain one of the most effective management tools for monitoring any illegal activity in the Lower Zambezi National Park (LZNP) and surrounding Game Management Areas (GMAs). Conservation Lower Zambezi (CLZ) and the Department of National Parks and Wildlife (DNPW, formerly the Zambian Wildlife Authority – ZAWA) are fortunate to have access to a plane that allows them to carry out aerial patrols in the Lower Zambezi Area Management Unit on a monthly basis. The plane (Cessna 172) is owned by Glenn Goodall, who has been kindly leasing the plane to CLZ since 2010, and is piloted by CLZ’s CEO Ian Stevenson. Following a three-year extension of the lease in 2012 which came to an end in August 2015, Glenn Goodall generously agreed to extend the lease of the aircraft for another three years (July 2018).

**A huge thanks to Glenn Goodall for his support to CLZ and wildlife protection in the Lower Zambezi!**

The plane continues to play a vital role in monitoring illegal activities and supporting patrol teams in LZNP and in the surrounding GMAs. Every year, CLZ receives a formal letter of support from DNPW/ZAWA as required by the Zambian DCA and ZAF to allow the 9J-CLZ to continue aerial work over the park and GMAs (CLZ is has requested this letter for 2016). Following from previous years, in 2015, the plane again was essential for spotting illegal activity, especially for finding elephant carcasses. As indicated below, the plane was responsible for detecting **60% of all poached elephant carcasses** found in 2015, and **52% of all elephant carcasses**.

**Table 2:** Summary of reported cases of elephant mortality in the Lower Zambezi National Park and surrounding Game Management Areas in 2015.

Carcasses Found By	Poached Elephants Park		Poached Elephants GMA		TOTAL Poached Elephant		Natural/Unknown Mortality		Total Elephant carcasses found in 2015	
							Park	GMA		
ZAWA/Patrols	12	28%	16	36%	28	32%	5	4	37	35%
Guides/Operators	0	0%	2	4%	2	2%	4	0	6	6%
CLZ Staff	0	0%	0	0%	0	0%	0	0	0	0%
Plane	31	72%	22	49%	53	60%	0	2	55	52%
Community	0	0%	3	7%	3	3%	0	1	4	4%
Kayila Scouts	0	0%	2	4%	2	2%	0	2	4	4%
Others	0	0%	0	0%	0	0%	0	0	0	0%
<b>Total</b>	<b>43</b>	<b>100%</b>	<b>45</b>	<b>100%</b>	<b>88</b>	<b>100%</b>	<b>9</b>	<b>9</b>	<b>106</b>	<b>100%</b>

The plane was also regularly utilized to support patrol teams in the field, including evacuating scouts for medical reasons, emergencies and delivering urgent packages such as rations or radio batteries. This aerial support is essential, especially in the Eastern end of the Park where the scouts patrol in completely inaccessible by road. The plane lands in open areas of the park when needed for resupplying patrols and picking sick officers. This goes along way with building scouts moral and confidence in the field.



## Flight hours & Maintenance

### Flight hours

The aircraft is budgeted to fly for 12 hours/month (144 hours/year). This year, the plane flew a total of 192 hours in the LZNP, surrounding GMAs and Kafue National Park (KNP). The plane flew a total of 10.2 hours in the Kafue National Park for various operations, earning CLZ \$4,080 to contribute to the running costs of the plane (charged at \$400/hour). Of this time, 4.4 hours were used to assist the Zambian Carnivore Programme in tracking cheetah, lion and wild dogs in their project area in KNP. On these flights, a number of collared animals were re-located after not having been seen for a number of years. The plane also flew 2.5 hours of aerial patrolling for Game Rangers International (GRI) and DNPWS/ZAWA, with another 3.3 hours of ferry flights to KNP and back.

**Table 1:** Monthly flight hours by CLZ’s plane 9J-CLZ in 2015.

Month	Hours/Month
Jan	13.8
Feb	11.7
Mar	13.2
Apr	15.2
May	17.9
Jun	23.5
Jul	18.3
Aug	12.1
Sep	8.8
Oct	14.4
Nov	25.4
Dec	17.7
<b>Total</b>	<b>192.0</b>

### Maintenance

- Check I carried out 3<sup>rd</sup> February 2015
- Check II carried out 5<sup>th</sup> May 2015
- Check II carried out 9<sup>th</sup> August 2015
- C of A completed 2<sup>nd</sup> October 2015
- Check I carried out 10<sup>th</sup> December 2015

In September 2015, CLZ was informed that the plane will need to have the engine reconditioned, quoted at US\$35,000. Glenn Goodall has kindly committed to covering 20% of the cost (US\$7,000). CLZ has to-date successfully raised US\$15,000 to contribute to this through the Tusk Trust grant. CLZ has identified another private donor who is interested in covering the remaining US\$13,000 needed for the re-conditioning. The engine work is intended to be done later in the year as soon as the necessary funds have been secured. Furthermore, CLZ is trying to raise another US\$10,000 to get the plane re-sprayed and the interior refurbished in 2016.

As part of the new digital communications system that will be established in the area (funded by US Fish and Wildlife Services: approximately US\$90,000), CLZ raised funds for a new radio system to be installed in the plane. The funds were received at the end of 2015, so the new radio system is expected to be installed in the next two months.

Parts purchased and replaced in 2015 include one magneto, one wheel rim, two brake disks and a section on the front landing gear.



In 2015, aerial patrols were generously supported by the following donors:

- Glenn Goodall (lease of plane)
- Leon-Judah Blackmoore Foundation
- African Wildlife Foundation

## Appendix 1: Aerial patrol tracks for each quarter, 2015



