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The late John Aspinall (1926-2000) created and financed the Howletts and Port Lympne zoological parks in Kent in 1959 and 1975 respectively, and in 1984 founded The Aspinall Foundation as a UK-registered charity (under the name of The Howletts and Port Lympne Foundation, and subsequently The John Aspinall Foundation). The vision of The Aspinall Foundation has always been to contribute to global species conservation through integrating *ex situ* and *in situ* conservation activities.

Elephants and rhinos have been considered as particularly important species by the Foundation throughout its history. Within a year of creating the Foundation, John Aspinall pioneered efforts to save the Sumatran rhino from extinction (Figure 1; see colour plates: page vii). On 24 May 1985 an agreement was signed between the Foundation and the government of Indonesia to create a Sumatran rhino conservation project (Aspinall 1985b; Nardelli 1985, 1988; Martin 1989). By August 1985 a base-camp had been constructed in Sumatra in a forest area where the rhinos were doomed by the extension of logging activities, and on the 25 November the first Sumatran rhino was captured, to be named *Torgamba* (Nardelli 1986). *Torgamba* travelled to Port Lympne in 1986, where he was paired briefly with a female (*Subur*) before she died later the same year (Furley 1993), then with another female (*Meranti*) from 1988 until her death in November 1994. *Meranti*'s post-mortem analyses revealed a large tumour in her uterus, and also suggested she was much older than previously thought (Kitchener 1997), providing a probable explanation for the lack of reproduction during her time at Port Lympne. *Torgamba* was subsequently returned to Sumatra in 1998 to the Sumatran Rhino Sanctuary in Way Kambas National Park (Litchfield 1998).

The captive-breeding programme initiated by John Aspinall was taken on by several American zoos from 1987 (Nardelli 1987; Aspinall 1990), finally resulting in a birth in captivity in 2001, in Cincinnati; the only previous captive-birth of the species being in Calcutta in 1889 (Rookmaaker 1998, Litchfield 2001).

Javan rhino have also benefited from considerable support from the Foundation, including a donation in 2011 of 100 camera-traps to the Indonesian Ministry of Environment and Forestry following their urgent request for improving monitoring of the last surviving wild population, in Ujong Kulon National Park. Many of the first camera-trap images of Javan rhino were probably made with these traps. Also in 2011, the Foundation provided a grant to Save the Rhino International to support the Javan Rhino Study and Conservation Area project, aiming to increase suitable habitat for Javan rhinos in the Gunung Honje area.

Back in the UK, The Aspinall Foundation has been remarkably successful in breeding eastern black rhino, with 41 births between 1977 and February 2018 (Table 1). As a key component of the Foundation's philosophy has always been the reintroduction of species to protected areas whenever possible (Aspinall 1985a, 1987; Begg 1987), to date the Foundation has returned eight black rhino to Africa (Figure 2; see colour plates: page vii). The first, a male named *Bwana Kidogo*, went to a semi-wild breeding programme at Addo National Park in South Africa in 1995 (White 1995, 2000; Aspinall 1996). Having already sired at least two offspring at Addo, he was moved in October 2000 to Thabo Tholo, a 36,000 ha private reserve in northern province of South Africa, where he rapidly became the dominant male of his group and continued to sire more offspring (White 2001). Two female rhinos, *Kivu* and *Tana*, were subsequently also sent to Thabo Tholo in 2004, where *Kivu* has given birth to at least eight calves and *Tana* to at least three. The Thabo Tholo population has subsequently provided black rhino to reintroduction

projects in Tanzania (Fyumagwa and Nyahongo 2010), and more recently in Rwanda (Knight 2017). In June 2007 two five-year-old rhinos, a male (*Limpopo*) and a female (*Laikipia*) were sent from Port Lympne to the 140,000 ha Grumeti Reserve in Tanzania (Claire Lewis, in litt. 2007; Fyumagwa and Nyahongo 2010), and in June 2012 one male (*Monduli*) and two females (*Zawadi* and *Grumeti*) joined the reintroduction programme in the Mkomazi Rhino Sanctuary, Tanzania (Fitzjohn 2013), with both females having calves in 2016. The Aspinall Foundation has also supported other African rhino conservation work on an ad hoc basis (e.g. Hearn et al. 2000).

While most of our rhino births in the UK have been at Port Lympne, all 22 of our African elephant births have been at Howletts, between 1982 and 2014 (Table 2). Howletts therefore appears to be the largest-known breeder of African elephants in captivity, followed by San Diego, Ramat Gan and Cabarceno with at least 19, 18 and 17 recorded births respectively (ZIMS 2018). Eight different cows have given birth at Howletts (Table 2). In 2015 a bull elephant exchange between Europe's two largest African elephant holders, Howletts and Cabarceno, was organised to help try to address a general problem within Europe of

insufficient births to sustain a captive population (Van Wees et al. 2013).

The Aspinall Foundation has been working in Central Africa for over two decades, managing two gorilla reintroduction programmes with associated protected area management projects (King et al. 2012). These projects protect diverse habitats and fauna, including forest elephants in the Batéké Plateau National Park in Gabon (Hedwig et al. 2018; Fig. 3). In Congo-Brazzaville the challenges of implementation of the law enforcement activities related to the gorilla programme led to the creation of a new project focussing solely on facilitating wildlife law enforcement across the country. This project, known as PALF, has resulted in several ivory seizures in Congo, and court trials of major ivory dealers.

Most poignantly at this time, we remember that The Aspinall Foundation has provided considerable long-term financial support to the remarkable work of the late Esmond Bradley Martin and Lucy Vigne to uncover and disrupt the international trade in ivory and rhino horn (e.g. Martin and Martin 1989, 2013; Vigne and Martin 1989, 2000, 2008; Martin 2001, 2004; Martin et al. 2010; Martin and Vigne 2011, 2013; Vigne 2013). Esmond will of course be sorely missed, but his legacy provides hope for elephants and rhinos across the world.



Figure 3. A family of forest elephants caught on camera-trap in the Batéké Plateau National Park, Gabon. (Photo: The Aspinall Foundation).

Table 1. List of eastern black rhinos born at Port Lymgne and Howletts, 1977 to Feb 2018.

| Local ID | Name | Sex | DoB | Sire | Dam | Notes |
|----------|--------------|-----|------------|--------------|-------------|----------------------|
| P77001 | Basha | M | 11/08/1977 | Baringo | Naivasha | |
| P80027 | - | F | 18/05/1980 | Baringo | Rukwa | |
| P83001 | Kingo | M | 02/10/1983 | Baringo | Rukwa | |
| P83002 | Arusha | F | 11/11/1983 | Baringo | Naivasha | |
| P89001 | N'akuru | F | 30/10/1989 | Bwana Mkubwu | Rukwa | |
| P90000 | Magadi | M | 09/01/1990 | Bwana Mkubwu | Naivasha | |
| P90002 | Katakata | M | 18/10/1990 | Bwana Mkubwu | Mama Kidogo | |
| P91052 | Bwana Kidogo | M | 20/11/1991 | Bwana Mkubwu | Naivasha | Sent to South Africa |
| P91062 | | M | 28/12/1991 | Basha | June | |
| P92105 | Baringo II | M | 03/12/1992 | Baringo | Rukwa | |
| P95006 | - | F | 03/03/1995 | Kingo | Mama Kidogo | |
| P96037 | Mweru | M | 12/09/1996 | Gareth | N'akuru | |
| P96046 | Ruaha | F | 21/12/1996 | Parky | Rukwa | |
| P97037 | - | F | 06/06/1997 | Parky | Naivasha | |
| P98058 | Tana | F | 08/09/1998 | Gareth | Etna | Sent to South Africa |
| P98083 | Kivu | F | 09/12/1998 | Kingo | Vuyu | Sent to South Africa |
| P99015 | Magadi | M | 09/02/1999 | Gareth | Naivasha | |
| P99052 | Rufiji | F | 21/06/1999 | Gareth | Arusha | |
| P99082 | Zambezi | M | 29/10/1999 | Gareth | N'akuru | |
| P99089 | Galana | F | 22/11/1999 | Gareth | Rukwa | |
| P21025 | Solio | F | 30/07/2001 | Gareth | Rukwa | |
| P21059 | Limpopo | M | 23/10/2001 | Kingo | Etna | Sent to Tanzania |
| P21034 | Vungu | M | 08/11/2001 | Kingo | Vuyu | |
| P22063 | Laikipia | F | 09/03/2002 | Gareth | Naivasha | Sent to Tanzania |
| P22032 | Manyara | M | 18/09/2002 | Gareth | Jaga | |
| P22060 | Zambezi II | M | 31/12/2002 | Gareth | N'akuru | |
| P20331 | Nyasa | F | 16/09/2003 | Jos | Arusha | |
| P20578 | Damara | F | 18/12/2005 | Mwaniki | Vuyu | |
| P20600 | Monduli | M | 07/01/2006 | Mwaniki | Ruaha | Sent to Tanzania |
| P20700 | Grumeti | F | 03/01/2007 | Mwaniki | Etna | Sent to Tanzania |
| P20978 | Nyota | F | 25/12/2009 | Kingo | Vuyu | |
| P20171 | - | F | 04/11/2010 | Kingo | Etna | |
| P21104 | Nkosi | M | 22/01/2011 | Quinto | Ruaha | |
| P21233 | Kisima | F | 01/07/2012 | Zambezi II | Nyasa | |
| H21425 | Kasungu | M | 01/10/2015 | Zambezi II | Damara | Born at Howletts |
| P21642 | Zuri | M | 27/08/2016 | Sammy | Ruaha | |
| H21470 | Mizi | F | 16/10/2016 | Zambezi II | Salome | Born at Howletts |
| P21660 | Rukuru | F | 19/12/2016 | Sammy | Nyasa | |
| P21754 | Malewa | M | 05/01/2018 | Sammy | Kisima | |
| P21757 | Mlimba | F | 31/01/2018 | Sammy | Solio | |
| P21769 | Azizi | M | 23/02/2018 | Sammy | Nyota | |

Table 2. List of African elephants born at Howletts, 1982 to Feb 2018.

| Local ID | Name | Sex | DoB | Sire | Dam | Notes |
|----------|---------|--------|------------|-------|--------|--------------------|
| H82030 | Sabi | Female | 25/05/1982 | Bwana | Masa | |
| H85040 | Swana | Female | 02/07/1985 | Bwana | Masa | |
| H94029 | Osh | Male | 24/05/1994 | Yossi | Sara | Sired at Ramat Gan |
| H94040 | Issa | Female | 27/07/1994 | Yossi | Lara | Sired at Ramat Gan |
| H97033 | Jumar | Male | 15/04/1997 | Jums | Tami | |
| H97060 | Umna | Female | 18/07/1997 | Jums | Swana | |
| H97061 | Jasa | Male | 06/08/1997 | Jums | Masa | |
| H98083 | Justa | Female | 25/10/1998 | Jums | Stavit | |
| H20511 | Jara | Female | 27/04/2005 | Jums | Tami | |
| H20532 | Janu | Male | 07/07/2005 | Jums | Swana | |
| H20630 | Jama | Female | 17/07/2006 | Jums | Masa | |
| H20647 | Juva | Male | 24/09/2006 | Jums | Stavit | |
| H20802 | Uzuri | Female | 17/02/2008 | Jums | Tami | |
| H20861 | Etana | Female | 15/12/2008 | Jums | Swana | |
| H20942 | - | Female | 21/06/2009 | Jums | Umna | |
| H21035 | Manzi | Female | 18/05/2010 | Jums | Justa | |
| H21101 | Mchumba | Male | 24/01/2011 | Jums | Masa | |
| H21102 | - | Female | 25/01/2011 | Jums | Masa | |
| H21104 | Mchumba | Female | 29/01/2011 | Jums | Tami | |
| H21108 | Juluka | Female | 15/02/2011 | Jums | Stavit | |
| H21127 | Impi | Male | 05/06/2011 | Jums | Swana | |
| H21321 | Mirembe | Female | 07/06/2014 | Jums | Tami | |

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Help Newsletter, abbreviation for *Help: Friends of Howletts and Port Lympne Newsletter*.

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See King and Beer/The Aspinall Foundation. *Rhinos, elephants and the Aspinall Foundation: over 30 years of captive-breeding, reintroduction and conservation*. pp. 127-131

Above left. Figure 1. John Aspinall with the male Sumatran rhino, *Torgamba*, at Port Lympne, UK. (Photo courtesy of Amos Courage).

Above right. Figure 2. Two eastern black rhinos, *Zawadi* and *Grumeti*, sent from Port Lympne to Tanzania in 2012, with one of their calves in 2016. (Photo: The George Adamson Wildlife Preservation Trust).



See Hawley et al. *Conspecific investigation of a deceased forest elephant (*Loxodonta cyclotis*)*. pp. 97-100

Below right. Figure 2. Elephant decay at a) Day 4, b) Day 10 and c) Day 18.

