

# Ringling and observation of migrants at Ngulia Lodge, Tsavo West National Park, Kenya, 2013–2015

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## Summary

The review of migrant bird ringing at Ngulia Lodge by Pearson *et al.* (2014) is updated. During late autumn sessions in 2013, 2014 and 2015 a further 35 000 Palaearctic birds were trapped. Species ringing totals for the three years are tabulated, together with overall ringing totals since the onset of this project in 1969. Twenty long distance ringing recoveries reported since the 2014 review are listed, and a breakdown is given by country of recovery numbers since the start of the project.

Between 25 November and 13 December 2013 regular persistent night mists accounted for a successful session with 21 052 migrants ringed. Marsh Warbler *Acrocephalus palustris* formed 49% of this catch. A Wood Warbler *Phylloscopus sibilatrix* was the first caught here for 20 years. A Thrush Nightingale *Luscinia luscinia*, a Marsh Warbler and a Barn Swallow *Hirundo rustica* were controlled bearing foreign rings. In 2014, a session between 16 November and 2 December produced good species variety, but night mists were confined to the first week. Thrush Nightingale was the dominant species in a modest Palaearctic catch of 7051. Marsh Warbler numbers were unusually low, and one regular species, Basra Reed Warbler *Acrocephalus griseldis*, was almost absent. Heavy showers brought well over 1000 Eurasian Rollers *Coracias garrulus* and a gathering of 1500 Amur Falcons *Falco amurensis* to the lodge on the afternoon of 1 December. In 2015, a late session with nine misty nights between 6 and 20 December resulted in 7638 migrants ringed, with Marsh Warbler by far the dominant species. Basra Reed Warbler numbers had returned to normal, and those of Great Reed Warbler *Acrocephalus arundinaceus* and Sedge Warbler *A. schoenobaenus* were unusually high.

Over three years the bush cover used for trapping north of the lodge has shown continued loss as a result of increased elephant pressure during the dry season.

## General Report for 2013–2015

A history of the ringing of Palaearctic birds at Ngulia Lodge, Tsavo West National Park, from its beginnings in 1969, was recently given together with a review of results up to 2012 (Pearson *et al.* 2014). Until 1992 there were regular reports from Ngulia in *Scopus* (Backhurst & Pearson 1977–1993), and it is intended that this tradition should be revived. This paper therefore updates the record and reports on ringing sessions at the lodge in the late autumns of 2013, 2014 and 2015. An additional 35 000 birds have been ringed since Pearson *et al.* (2014) and a further 20 recoveries reported.

Attractions of thousands of migrant passerines to floodlights at Ngulia depend on night mist (low ground level cloud) with or without rain showers under moonless conditions. Ringing sessions are therefore organized over periods of two to three weeks centred over a new moon. They are mostly conducted during the main period of southward migration in November and December, and there has unfortunately

been little recent opportunity to build on the earlier investigations of other months. The varying date of the new moon means that the timing of concerted ringing activity changes within the migration season from year to year. Thus the lodge was manned in 2013 from 25 November to 12 December (new moon 3 December), in 2014 from 16 November to 2 December (new moon 22 November) and in 2015 from 6 to 20 December (new moon 11 December). It was not possible in 2015 to mount an earlier session in mid November as happened with similar new moon timing in 2009 and 2012.

Floodlighting at the lodge for game viewing is now greatly reduced, so to provide the illumination necessary to attract birds in large numbers it has become necessary to employ additional halogen lamps. For the 2013–2015 sessions three additional lamps (3.5 kW in total), facing between north and northeast, were set up within 70 m of the north side of the building. The result was comparable with that achieved by the lodge's lights in the early Ngulia years. Catching procedures followed those which have now become standard. At night, two 18 m mist nets were positioned below the floodlights whenever mist was present. Birds were extracted from these continuously, to be ringed, processed and released with minimal delay by one to two ringing teams working within the lodge. An arrangement of about 20 nets (some 18 m, others 9 m or 12 m, *c.* 270 m in all) was then opened shortly before sunrise in the bushy area within 250 m of the lodge on its north side to catch grounded birds dispersing from near the lights. These were open for the next two to three hours, only occasionally longer, and cleared continuously by extractors. Later on some mornings a few nets were opened immediately in front of the building to catch low flying Barn Swallows attracted by taped song lures. The ringing team in the three years numbered up to 26 in 2013, 21 in 2014 and 15 in 2015. About half of the participants were from Kenya, half from overseas, mostly Europe. They are all listed under Acknowledgements.

Success at the lodge depends mainly on the frequency and persistence of night mist. In 2013 there was mist on 13 of the 18 nights covered over a peak migration time, and 21 020 migrants were ringed, the highest annual catch since 2005. But in 2014 eight of the 16 nights proved mist free and the catch of 7051 migrants was consequently rather low. In 2015 mist occurred on nine of the fourteen nights covered, but again only a modest total of 7638 was achieved, due partly to the lateness of this session, in mid December, when migration was undoubtedly tailing off.

The state of the bush and its ability to hold grounded migrants has an impact, particularly on the catches taken after dawn. Cover is typically thin and leafless during November ringing, before the rains cause new growth, but becomes green and luxuriant in December. Habitat in the daytime netting area has been modified greatly by elephants, from continuous bush with few openings in 1995 to grassland with scattered bushes in 2015, with thicket covering only about 20%. These changes were evident by 2008 but have accelerated recently, notably after severe dry seasons in 2013 and 2014, when bushes disappeared and small trees were debarked and destroyed.

The main events and features of each of the three recent sessions are outlined below. The species breakdown of the annual totals is given as Appendix 1, which also shows the overall total since 1969 of each species ringed, and gives scientific names. Recoveries and controls additional to those given by Pearson *et al.* (2014), and reported since September 2013, are listed as Appendix 2. There are now 243 ringing movements of Palaearctic birds involving Ngulia; the number to or from each country is shown in Appendix 3.

### **25 November–13 December 2013**

With rains normally timed, the bush around the lodge was beginning to leaf out at

the start of the session, but had been alarmingly reduced by elephant activity. There were then showers on most days and the remaining cover quickly greened. Mist appeared, often thick and persistent, on all except two of the first 13 nights, and a series of large catches was made once a waning moon in the later hours ceased to affect events. Ringing totals above 2000 were recorded on five dates, with a notable 2990 on 3 December. Over 19000 migrants had been ringed by 8 December, but more variable conditions with only two nights with brief mist added relatively few over the last five days. Marsh Warbler with 49% dominated the session catch, followed by Thrush Nightingale (25%). Notable totals were produced by River Warbler, Irania, Red-backed Shrike, Common Nightingale and Upcher's Warbler. Barn Swallows appeared in front of the lodge by day over the middle of the session and made a substantial contribution. Four Eurasian Rollers were caught but there were few Eurasian Nightjars. A Wood Warbler on 2 December was the first here since 1995. There were three controls of birds wearing foreign rings: a Thrush Nightingale from Norway, a Marsh Warbler from Belgium and a Barn Swallow from Kazakhstan. The overall daytime catch (59% of the total) exceeded that taken at night.

Migrant raptors observed included frequent Steppe Eagles *Aquila nipalensis* (c.30 passing on 27 November), several Lesser Spotted Eagles *Aquila pomarina*, a Greater Spotted Eagle *Aquila clanga* and 2 European Honey Buzzards *Pernis apivorus* on 27th, and occasional Steppe Buzzards *Buteo buteo vulpinus*, Booted Eagles, Grasshopper Buzzards *Butastur rufipennis* and Eurasian Hobbies. Amur Falcons *Falco amurensis* appeared in groups of up to c.80 between 27 November and 7 December. A Levant Sparrowhawk circled over the lodge on 25 November when a Sooty Falcon *Falco concolor* also passed low overhead, and a male Eurasian Sparrowhawk gave prolonged perched views on 7 December. Afrotropical migrants encountered included many Jacobin Cuckoos *Clamator jacobinus* (up to ten seen in one bush), a Great Spotted Cuckoo *C. glandarius* on 2 December, a Levaillant's Cuckoo *C. levaillantii* ringed on 5 December, and occasional Golden Pipits *Tmetothylacus tenellus*. An adult African Black Swift *Apus barbatus*, new to the ringing list, was presumed to be from a nest on the building.

Bird recording radar equipment was set up by the Swiss Ornithological Institute early in November 2013 and was in operation through much of this session. With data analysis being completed, answers are anticipated to some previously unresolved questions concerning migrants in transit above Ngulia (H. Stark pers. comm.).

### 16 November–2 December 2014

Despite earlier rain in the area the bush around the lodge was still leafless on 16 November, and appeared scant, with evidence of further elephant destruction. Greening occurred gradually throughout the session but there was no rain until the last three days. Things began in promising fashion, with five nights of excellent mist and over 6000 birds ringed during the first week. These were early season catches, so the dominance of Thrush Nightingale (over half the catch on some days) and the high numbers of typical November species such as Red-backed Shrike, Spotted Flycatcher, Olive-tree Warbler and Common Nightingale were not unexpected. But the relative lack of Marsh Warblers was surprising, bucking the trend of recent years, as was a near absence of Basra Reed Warblers. Eurasian Nightjars, strangely absent, would have been expected to feature more prominently in November. The second week was a disappointing contrast. A changed weather pattern, with cloud movement from the southwest rather than the east, resulted in five successive clear nights. But with brief misty spells on 29 and 30 November, low cloud on 1 December and heavy

overnight rain on 2 December some 720 more birds were ringed at the end of the session, among which Marsh Warbler and Common Whitethroat now outnumbered Thrush Nightingale. There were few Barn Swallows to net by day, but these included a retrapped bird ringed at the lodge in December 2010. The majority of birds (58%) was caught at night this year.

Raptor observation was rewarding. A few Steppe Eagles, occasional Lesser Spotted Eagles, Steppe Buzzards and Booted Eagles, a European Honey Buzzard and a Montagu's Harrier *Circus pygargus* were recorded, as well as a Eurasian Sparrowhawk on 27 November. Groups of up to 150 Amur Falcons were seen almost daily from 18 November, then heavy showers late on 1 December brought hundreds down around the lodge, and an estimated 1500 or more gathered to roost in the Ngulia valley. Sooty Falcons (one–two) were noted on six different dates, a dark Eleonora's Falcon several times over the first days, and Eurasian Hobbies in the rain of 1 December. Two Barbary Falcons *Falco peregrinus pelegrinoides* hunted around the lodge on the evenings of 25–27 November. A few Eurasian Rollers appeared at the lights during early misty nights, but remarkable numbers passed the lodge when rains eventually broke. Over 500 were counted moving southeast on the afternoon of 30 November, then over 600 next morning before a heavy afternoon shower brought down well over 1000 more. Birds were perched throughout the Ngulia valley, then moved slowly from bush to bush past the lodge before taking off across the plains to the southeast. A few Afrotropical nightjars (Plain *Caprimulgus inornatus*, Dusky *C. fraenatus* and Donaldson Smith's *C. donaldsoni*) were ringed at night during the first week. Other presumed migrants or wanderers ringed included Singing Bush Lark *Mirafra cantillans*, Grey-headed Kingfisher *Halcyon leucocephala*, African Paradise Flycatcher *Terpsiphone viridis*, Eastern Nicator *Nicator gularis* and Black Cuckoo Shrike *Campephaga flava*. A Little Sparrowhawk *Accipiter minullus* was only the second ringed at the lodge.

## 6–20 December 2015



The main net ride with the dead acacia behind, 11 December 2015; this area was densely bushed up to 2010.

Bush was in full leaf and grass already well grown when the session began. Further loss to elephant damage was thus hidden although remaining acacias were now dying.

The session produced nine nights with mist, three of these also with heavy showers, but otherwise there was no rain. The daily catch of migrants exceeded 1000 on only four occasions, but an eventual total of over 7600 was reasonable for a session centred on mid December. On some misty nights there was a surprising

lack of birds at the lights, suggesting that migration was tailing off early. Again there were no foreign controls and no returns from our ringing in previous years. Marsh Warblers accounted for over 64% of the night migrant catch, a dominance perhaps expected this late in the season. Thrush Nightingale passage by contrast was subdued, a complete reversal of the situation in November the previous year. Variety

was good, but ‘early’ passage species such as Olive-tree Warbler, Spotted Flycatcher and Rufous Bush Chat were in short supply, and there were relatively few shrikes. Basra Reed Warbler, with 42 ringed, made a good contribution after its near absence the year before, and two *Acrocephalus* species – Sedge Warbler (26) and Great Reed Warbler (19) – exceeded all previous annual ringing totals. A Eurasian Scops Owl was the first to be netted since 2010, and a few Eurasian Rollers were ringed. It was a poor year for Barn Swallows with never many feeding in front of the Lodge, but Common House Martins were attracted successfully with taped song lures and returned a notable total of 39. The great majority of birds (74%) were taken by day this year and night catches were generally disappointing.

Daily watches produced rather few migrant raptors, as is often the case in December. There were occasional Steppe Eagles, Steppe Buzzards and Booted Eagles, two Lesser Spotted Eagles, a Long-legged Buzzard *Buteo rufinus* on 10 December, and a European Honey Buzzard on 13th. A Sooty Falcon circled over the lodge on 7th and a few small high groups of Amur Falcons were noted between 7th and 11th. The maximum count of passing Eurasian Rollers was of 300 on 14th. Afrotropical migrants included good numbers of Harlequin Quails *Coturnix delegorguei*, up to 10 Jacobin Cuckoos per day (14 caught and ringed) and a Great Spotted Cuckoo on 19th. Three African Black Swifts ringed included two juveniles.

### Acknowledgements

The Ngulia Project continues with the support of the Kenya Wildlife Service, and every assistance from the Management and staff of the Lodge. Financial help from the Wetlands Trust and from Dr Richard Charles is gratefully acknowledged. The rapid forwarding of recovery information by the Swedish Ringing Centre has been much appreciated. Graeme Backhurst is thanked for his help in the assembly of the recovery data.

Ringing participants during the 2013–2015 seasons were: Bernard Amakobe, Francis Argyle, Nick Branson, Bennie van den Brink, Martin Cade, Richard Charles, Dominic Chesire, Jan van Duinen, Dave Fletcher, Jaap Gijsbertsen, David Gitau, John Gitiri, Jan Heckmann, Hannah Hereward, Franziska Hillig, Benno van den Hoek, Titus Imboma, Colin Jackson, Roz Jessop, Phil Jones, Chege Kariuki, Ian Kerton, Cedric Khayale, Andrew Kinzer, Lennox Kithi, Peter and Ursula Köhler, Michael Kuflik, Gladys Kungu, Cornelia Laux, Mikhail Markovets, Bob and Fiona Medland, Dephence Mghoi, Clive Minton, Nathanael Mkombola, Edson Mlamba, Jacinta Mureithi, John Musina, Gerhard Nikolaus, Tabitha Njoki, Edwin Njuguna, Stephen Nyaga, Martha Nziza, David Pearson, Paul Roper, Attila Sandor, Mike Schaad, Herbert Stark, Susan Taylor, Lex Tervelde, Kasper Thorup, Dick Veitch, Peter Wairasho, Esther Wangoi, Brian Watmough, Lorraine Wheaton, Prue Wright.

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*Scopus* 36(2): 17–25, July 2016

Received 20 March 2016

**Appendix 1.** Palaearctic migrants ringed at Ngulia Lodge during autumn (October–January). Nomenclature and order follow the *Checklist of the Birds of Kenya*, 4th edition, Bird Committee, Nature Kenya, Nairobi, 2009.

	2013	2014	2015	1969–2015
Little Bittern <i>Ixobrychus m. minutus</i>				8
Black-crowned Night Heron <i>Nycticorax nycticorax</i>				1
Eleonora's Falcon <i>Falco eleonorae</i>				1
Eurasian Hobby <i>Falco subbuteo</i>				2
Levant Sparrowhawk <i>Accipiter brevipes</i>				1
Eurasian Sparrowhawk <i>Accipiter nisus</i>				5
Booted Eagle <i>Aquila pennata</i>				1
Corncrake <i>Crex crex</i>				12
Spotted Crake <i>Porzana porzana</i>				1
Great Snipe <i>Gallinago media</i>				1
Green Sandpiper <i>Tringa ochropus</i>				7
Wood Sandpiper <i>Tringa glareola</i>				13
Common Sandpiper <i>Actitis hypoleucos</i>				1
Common Cuckoo <i>Cuculus canorus</i>	1			17
Lesser Cuckoo <i>Cuculus poliocephalus</i>				15
Eurasian Scops Owl <i>Otus scops</i>			1	15
Eurasian Nightjar <i>Caprimulgus europaeus</i>	7	3	1	770
Common Swift <i>Apus apus</i>				2
Eurasian Roller <i>Coracias garrulus</i>	4	2	5	209
Eurasian Bee-eater <i>Merops apiaster</i>				4
Eurasian Wryneck <i>Jynx torquilla</i>				2
Red-backed Shrike <i>Lanius collurio</i>	163	235	44	5833
Isabelline Shrike <i>Lanius isabellinus</i>	33	55	10	2712
Eurasian Golden Oriole <i>Oriolus oriolus</i>				35
Sand Martin <i>Riparia riparia</i>				14
Barn Swallow <i>Hirundo rustica</i>	1551	389	476	27621
Common House Martin <i>Delichon urbicum</i>	2	2	39	643
Red-rumped Swallow <i>Cecropis daurica rufula</i>				1
River Warbler <i>Locustella fluviatilis</i>	547	84	151	14829
Savi's Warbler <i>Locustella luscinioides</i>				2
Basra Reed Warbler <i>Acrocephalus griseldis</i>	23	2	42	2600
Great Reed Warbler <i>Acrocephalus arundinaceus</i>	5		19	166
Sedge Warbler <i>Acrocephalus schoenobaenus</i>	3		26	287
Eurasian Reed Warbler <i>Acrocephalus scirpaceus</i>	2		3	209
Marsh Warbler <i>Acrocephalus palustris</i>	10352	1453	4550	226082
Eastern Olivaceous Warbler <i>Iduna pallida</i>	13	12	8	1427
Upcher's Warbler <i>Hippolais languida</i>	32	12	5	879
Olive-tree Warbler <i>Hippolais olivetorum</i>	36	40	4	2113
Icterine Warbler <i>Hippolais icterina</i>				11
Willow Warbler <i>Phylloscopus trochilus</i>	192	30	109	6698
Common Chiffchaff <i>Phylloscopus collybita</i>				2
Wood Warbler <i>Phylloscopus sibilatrix</i>	1			10
Blackcap <i>Sylvia atricapilla</i>	3	2	5	155
Garden Warbler <i>Sylvia borin</i>	46	14	28	2041

	2013	2014	2015	1969–2015
Barred Warbler <i>Sylvia nisoria</i>	49	20	28	2417
Common Whitethroat <i>Sylvia communis</i>	2335	1176	1054	104 027
Thrush Nightingale <i>Luscinia luscinia</i>	5270	3268	908	115 180
Common Nightingale <i>Luscinia megarhynchos</i>	76	48	16	2528
Irania <i>Irania gutturalis</i>	265	107	96	9557
Rufous Bush Chat <i>Cercotrichas galactotes</i>	4	9	3	1686
Common Redstart <i>Phoenicurus phoenicurus</i>				13
Whinchat <i>Saxicola rubetra</i>				4
Isabelline Wheatear <i>Oenanthe isabellina</i>			1	167
Northern Wheatear <i>Oenanthe oenanthe</i>		4		240
Pied Wheatear <i>Oenanthe pleschanka</i>		1		132
Common Rock Thrush <i>Monticola saxatilis</i>	8	11	2	574
Spotted Flycatcher <i>Muscicapa striata</i>	28	71	3	3280
Yellow Wagtail <i>Motacilla flava</i>				12
Tree Pipit <i>Anthus trivialis</i>			1	110
Red-throated Pipit <i>Anthus cervinus</i>				2
Oortolan Bunting <i>Emberiza hortulana</i>				2
Red-backed Shrike x Isabelline Shrike hybrid	1	1		27
Barn Swallow x Common House Martin hybrid				1
Blyth's Reed Warbler <i>Acrocephalus dumetorum</i> x Marsh Warbler hybrid				1
<b>Total</b>	<b>21 052</b>	<b>7051</b>	<b>7638</b>	<b>535 418</b>

**Appendix 2.** Recoveries and controls reported between September 2013 and May 2016 involving Ngulia, 3°00'S, 38°13'E.

**Barn Swallow *Hirundo rustica***

<i>Almaty</i>	20.09.13	4	Chokpak Ornithological Station, <b>Kazakhstan</b> , 42°31'N, 70°38'E
LA28382	05.12.13	R	Ngulia, 11:00, 6051 km, 76 d

**Marsh Warbler *Acrocephalus palustris***

<i>Stockholm</i>	01.12.10		Ngulia, 03:00
CP7625?	10.08.14	X	Hotat Sudair, 150 km N of Riyadh, <b>Saudi Arabia</b> , 26°10'N, 46°40'E, 3366 km, 1718 d

[Last digit of the ring number not given, probably this species, but possibly *S. communis*]

<i>Stockholm</i>	12.12.12	4	Ngulia, 03:00
XA07714	06.08.14	+	Hayania, Ha'il, <b>Saudi Arabia</b> , c. 27°30'N, 41°40'E, c. 3400 km, 554 d
<i>Bruxelles</i>	09.08.13	3	Korbeek-Lo, Vlaams-Brabant, <b>Belgium</b> , 50°51'N, 04°45'E
13066956	28.11.13	R	Ngulia, 01:00, 6774 km, 91 d
<i>Stockholm</i>	10.12.13	4	Ngulia, 03:00
XA24386	16.08.14	+	Ar'ar, Northern Prov., <b>Saudi Arabia</b> , 30°59'N, 41°02'E, 3788 km, 249 d
<i>Stockholm</i>	06.12.08	4	Ngulia, 06:00
CL15614	07.06.15	R	Monte Peregro-Curtetone, Montova, <b>Italy</b> , 45°10'N, 10°41'E, 6004 km, 2374 d

Our second Marsh Warbler recovery to Italy, and a particularly long-lived bird.

<i>Stockholm</i>	10.12.10	3	Ngulia, 03:00
CP85260	08.08.15	X	Al Ain, Abu Dhabi, <b>UAE</b> , c. 24°15'N, 55°45'E, 3572 km, 1702 d
<i>Stockholm</i>	04.12.13	3	Ngulia, 00:00
XA18308	(15.05.15)	X	Near Ibri, Dhahirah, <b>Oman</b> , 23°17'N, 56°54'E, 3553 km, 527 d
<i>Stockholm</i>	08.12.12	4	Ngulia, 06:00
XA06365	17.08.15	XF	Al Zulfi, Riyadh, <b>Saudi Arabia</b> , 26°30'N, 44°41'E, 3351 km, 982 d
<i>Stockholm</i>	28.11.13	3	Ngulia, 06:00
XA10854	24.08.15	A	Rafha, Northern Borders, <b>Saudi Arabia</b> , 29°35'N, 43°35'E, 3665 km, 649 d
<i>Stockholm</i>	09.12.15	3	Ngulia, 06:00
XA31857	27.05.16	R	Naszály, Komárom-Esztergom, <b>Hungary</b> , 47°42'N, 18°17'E, 5958 km, 170 d

#### Upcher's Warbler *Hippolais languida*

<i>Stockholm</i>	25.11.11	3	Ngulia, 06:00
CP92217	12.08.14	?	c. 80 km NW of Riyadh, <b>Saudi Arabia</b> , 25°34'N, 45°51'E, 3279 km, 991 d

#### Barred Warbler *Sylvia nisoria*

<i>Stockholm</i>	05.12.13	4M	Ngulia, 03:00
2XH7450	(25.04.14)	?	Near Ha'il, Ha'il Prov., <b>Saudi Arabia</b> , c. 27°30'N, 41°40'E, c. 3409 km, c. 500 d

#### Thrush Nightingale *Luscinia luscinia*

<i>Stockholm</i>	21.11.12	3	Ngulia, 03:00
2XH1034	(05.09.14)	+	60 km SE of Uwayquilah, Northern Border, <b>Saudi Arabia</b> , 31°01'N, 42°22'E, 3805 km, 272 d
<i>Stavanger</i>	01.08.13	3	Borrevanet, Vestfold, <b>Norway</b> , 59°23'N, 10°26'E
EF55470	29.11.13	R	Ngulia, 03:00, 7347 km, 120 d
<i>Stockholm</i>	02.12.13	4	Ngulia, 02:00
2XH6677	09.09.14	A	Ekdu, Beheira, <b>Egypt</b> , 31°19'N, 30°14'E, 3906 km, 281 d
<i>Stockholm</i>	06.12.13	4	Ngulia 06:00
2XH6937	11.09.14	A	Ekdu, Beheira, <b>Egypt</b> , 31°19'N, 30°14'E, 3906 km, 279 d
<i>Stockholm</i>	01.12.13	3	Ngulia, 04:00
2XH2937	27.05.15	A	Kostroma, Kostroma Ob., <b>Russia</b> , 57°50'N, 40°58'E, 6764 km, 542 d

*Our furthest north Russian recovery.*

<i>Stockholm</i>	21.11.12	3	Ngulia, 06:00
2XH1164	14.08.15	A	Taganrog, Rostov Ob., <b>Russia</b> , 47°14'N, 38°53'E, 5581 km, 996 d
<i>Stockholm</i>	25.11.11	4	Ngulia, 00:00
2KS18210	03.05.16	R	Kizilirmak Delta, Samsun, <b>Turkey</b> , 41°39'N, 36°05'E, 4964 km, 1634 d



**Appendix 3.** Number of all recoveries and controls involving Ngulia to and from each country to March 2016.

Austria	3	Luxembourg	2
Belarus	1	Malawi	4
Belgium	18	Mozambique	3
Botswana	1	Netherlands	3
Czech Republic	15	Norway	2
Denmark	3	Oman	11
DR Congo	1	Pakistan	1
Egypt	11	Poland	1
Ethiopia	1	Russia	19
Finland	4	Saudi Arabia	45
France	3	Slovakia	1
Georgia	2	Slovenia	6
Germany	18	Sweden	5
Hungary	5	Switzerland	1
Iran	2	Syria	5
Israel	4	Tanzania	3
Italy	3	Turkey	2
Jordan	1	Ukraine	4
Kazakhstan	8	United Arab Emirates	2
Kenya	1	Yemen	4
Kuwait	3	Zambia	4
Lebanon	5	Zimbabwe	1
Lithuania	1	Total	243