

## Common Sandpiper

### *Actitis hypoleucos*

<b>Flyway</b>	Estimate:	<b>25 000 - 100 000</b>
	1% threshold:	250
	Staging threshold:	62
<b>Global</b>	Delany and Scott (2002):	2 455 000 – 4 030 000

### Population

The monotypic Common Sandpiper has a broad breeding distribution from western Europe to eastern Russia, and a non-breeding distribution that includes much of Africa, southern and south-eastern Asia, and Australia.

### Data

The Common Sandpiper uses coastal and inland wetlands and generally occurs in low densities. As such it has been poorly surveyed in the EAA Flyway and the population range of Delany and Scott (2002) was adopted. Available count data indicate that the bulk of the non-breeding population occurs in south-eastern Asia and Australia (Table 4.21).

### Important Sites

Few important sites were identified. The count from Kakadu National Park (Australia) suggests that the northern coast of Australia may support large numbers of Common Sandpipers in the non-breeding period, but count data are inad-

equated for the area. Bamford (1988) recorded 46 birds along about 10 km of mangrove creek-line within Kakadu National Park. There are many thousands of kilometres of such habitat in northern Australia. Other important sites in the non-breeding period were in Myanmar and the Philippines. On southward migration, important sites were located in China, Russia and south-eastern Asia, while on northward migration sites were only identified in Russia and China. There are counts from the early 1980s (Parish & Wells 1983) that indicate southward migration through the Serangoon area of Singapore, but this site has been modified and large counts have not been made at other locations in Singapore.

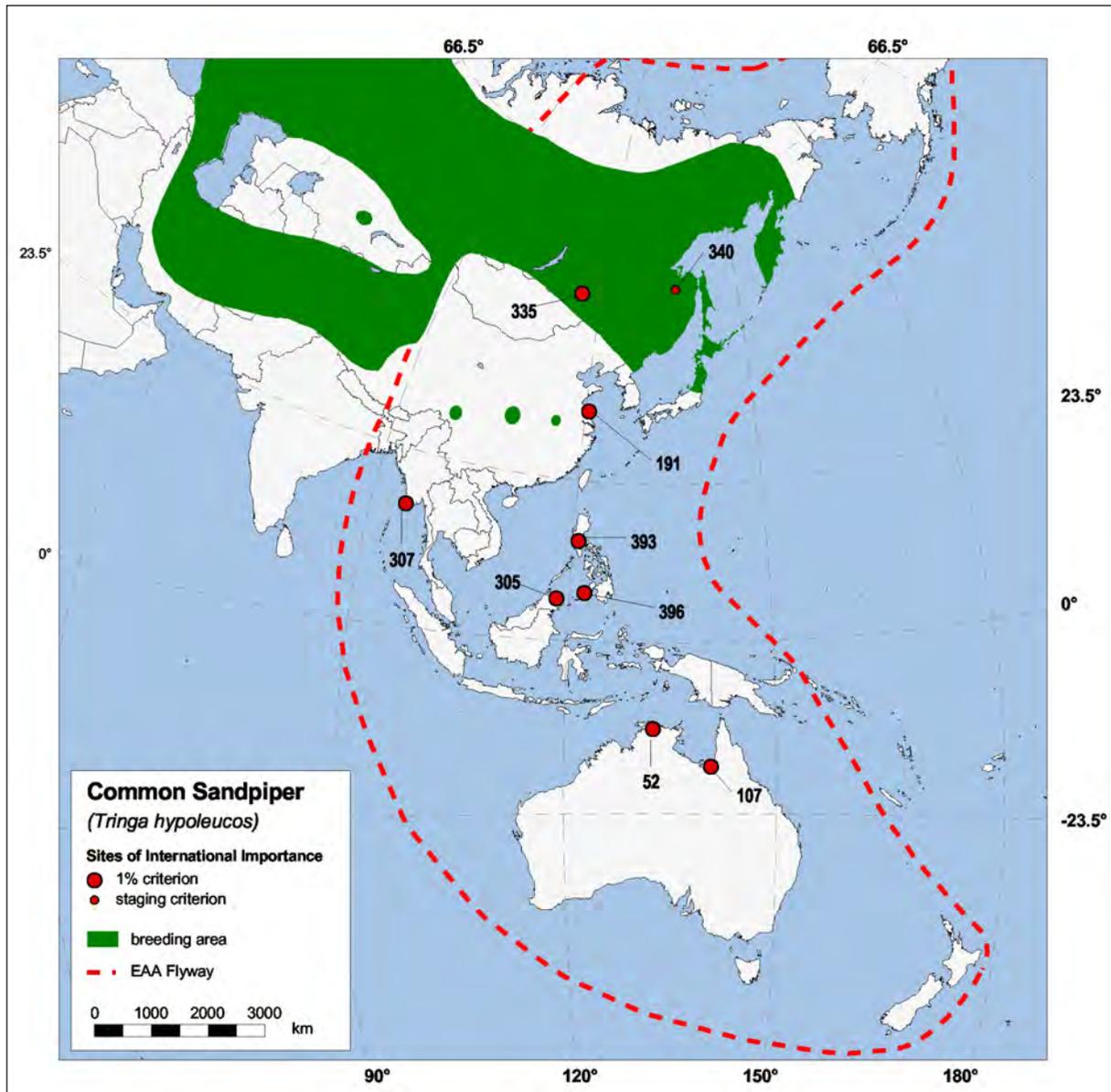
The numbers recorded for Daursky Nature Reserve (Russia) are an estimate of the number of birds on passage through the area. Few other important sites were identified during migration.

### Migration

Count data provide little information on migration patterns. The Common Sandpiper is reported to be more common in Japan on southward than northward migration (Higgins and Davies 1996). Higgins and Davies (1996) also report that the species migrates very early compared with other EAA Flyway shorebirds, so there may be inadequate surveys along the east coast of China at the time when Common Sandpipers are passing through the region.

**Table 4.21** Common Sandpiper - sites of international importance

Site Code	Site	Country	Max Count	Date	SM	NB	NM	B	Ref.
335	Daursky Nature Reserve	RUS	3,000	1/06/1995	.	.	✓	.	71
305	Tanjong Bidadari	MAL	2,030	1/09/1984	✓	.	.	.	120
191	Yancheng National Nature Reserve	CHI	1,546	1/05/1990	.	.	✓	.	164
396	Talon-Talon Wetland	PHI	1,000	20/01/1993	.	✓	.	.	169
393	Manila Bay	PHI	500	29/01/1990	.	✓	.	.	169
307	Irrawaddy Delta	MYA	397	25/01/1993	.	✓	.	.	169
107	SE Gulf of Carpentaria	AUS	321	1/03/1999	.	✓	.	.	51
52	Kakadu National Park	AUS	300	1/10/1987	.	✓	.	.	15
340	Lake Evoron	RUS	115	15/05/1988	.	.	✓	.	129



**Figure 4.29** Common Sandpiper – sites of international importance. Numbers refer to the respective site in Table 4.21.

## Grey-tailed Tattler

### *Heteroscelus brevipes*

<b>Flyway</b>	Estimate:	<b>50 000</b>
	1% threshold:	500
	Staging threshold:	125
<b>Global</b>	Delany and Scott (2002):	40 000

### Population

The Grey-tailed Tattler is confined to the EAA Flyway and no subspecies are recognised. The very similar Wandering Tattler *Heteroscelus incanus* breeds in North America and migrates across the Pacific Ocean to islands east of Australasia. It is a vagrant in the EAA Flyway.

### Data

The Flyway population estimate is greater than that proposed by Delany and Scott (2002) because of recent large counts in northern Australia during the non-breeding period. Chatto (2003) estimated 16 000 Grey-tailed Tattlers in the Northern Territory (Australia) during southward migration. Over 90% of the population is in Australia during the non-breeding period.

### Important Sites

The majority of important sites in the non-breeding period were in Australia (8), with one in the Philippines. Many sites in Australia were also identified on the basis of migration period counts, with some recognised only in these periods. Outside Australia, 51 sites important during migration were identified, with the majority (33) in Japan. Many of the sites in Japan were important during both migration periods, with 25 recognised during northward migration and 20 recognised during southward migration. Only 5 internationally important sites have been identified in South Korea and China.

### Migration

Both northward and southward migration appear to be concentrated through Japan. Grey-tailed Tattlers appear to be uncommon on the east coast of China, but they have been reported from Mongolia and central China (Higgins and Davies 1996).

The scarcity of important sites south of Japan suggests that the birds may undertake non-stop flights between this region and Australia, possibly via the Philippines in some cases. In support of this, Higgins and Davies (1996) report the species to be a rare passage migrant in much of south-eastern Asia during the southward migra-

tion period.

During northward migration, there are temporary influxes of birds in northern Australia and it has been estimated that some birds are capable of flying non-stop from north-western Australia to the Philippines (Haward and Barter 1991) or southern China (Lane and Jessop 1985).

M. Barter (pers. comm.) has reported large numbers at Xuan Thuy (Vietnam) on northward migration. Some northward migration is reported to occur through Hong Kong (Lane 1986).

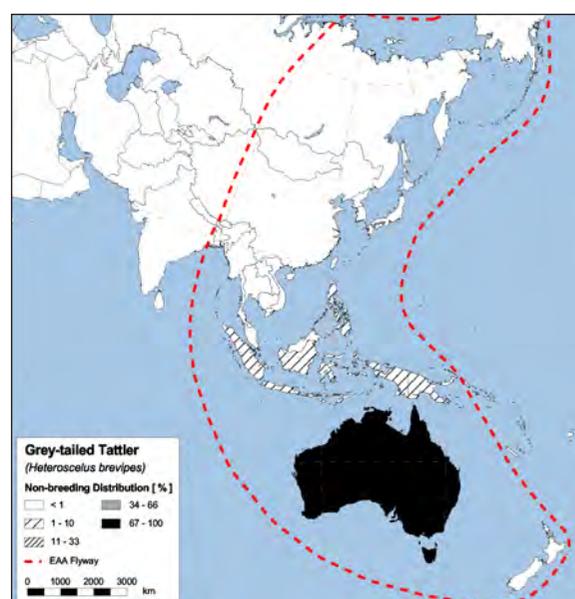


Figure 4.30 Grey-tailed Tattler – non-breeding distribution

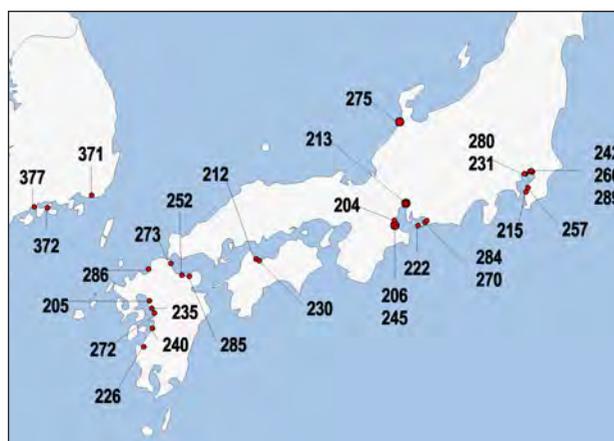


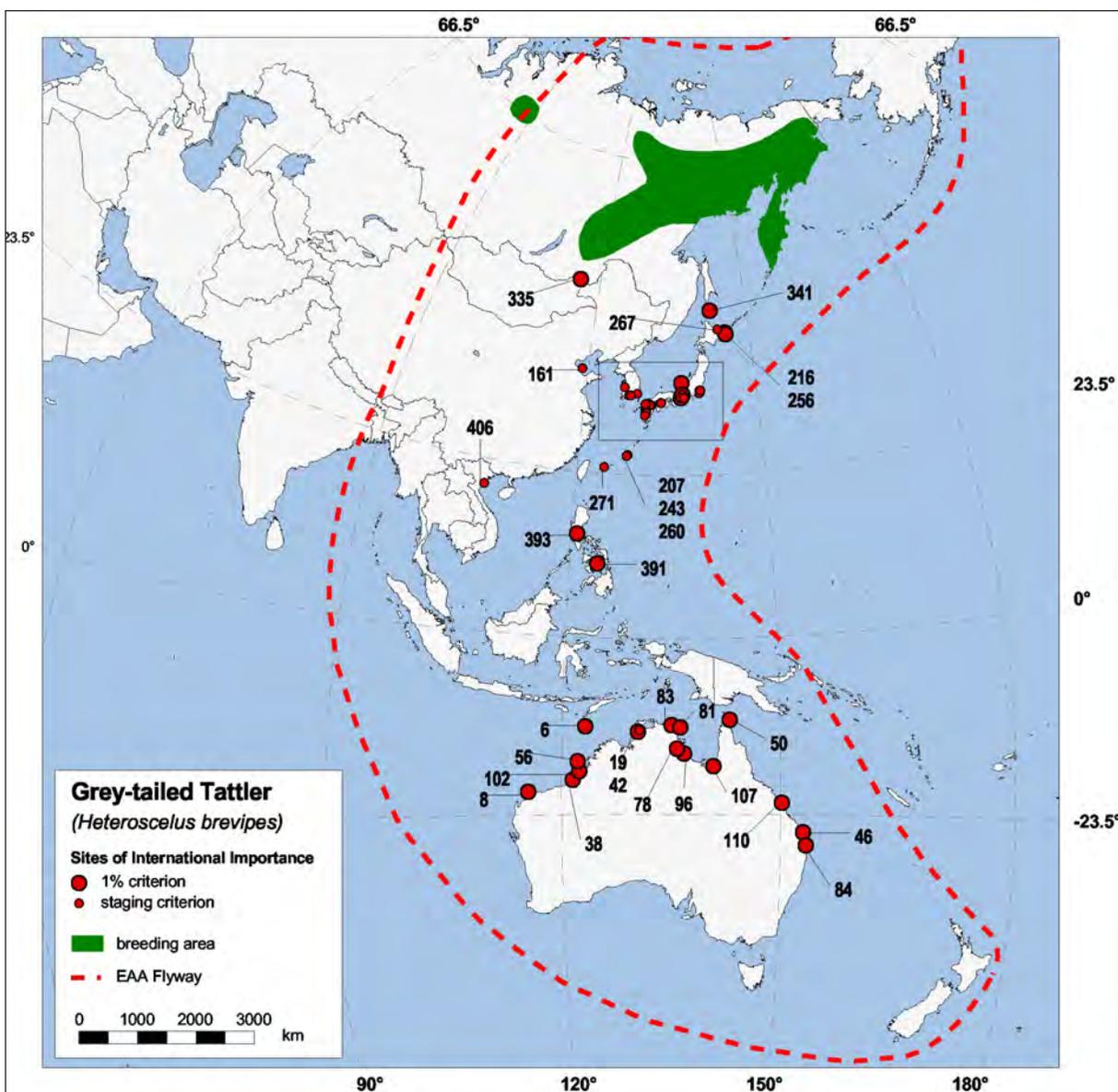
Figure 4.31b (enlargement) Grey-tailed Tattler – sites of international importance in southern Japan. Numbers refer to the respective site in Table 4.22.

**Table 4.22** Grey-tailed Tattler - sites of international importance

Site Code	Site	Country	Max Count	Date	SM	NB	NM	B	Ref.
38	Eighty Mile Beach	AUS	12,420	12/11/2002	✓	✓	.	.	147
46	Great Sandy Strait	AUS	7,680	1/01/1993	.	✓	.	.	50
84	Moreton Bay	AUS	3,736	1/12/1989	✓	✓	✓	.	48,49,49
102	Roebuck Bay	AUS	3,185	16/04/1985	✓	✓	✓	✓	100,55,11
110	Shoalwater Bay and Broad Sound	AUS	3,014	1/12/1995	.	✓	.	.	52
8	Barrow Island	AUS	2,634	12/01/2004	✓	✓	✓	.	14,14,14
216	Fuuren-ko (Onnetou ohashi)	JAP	2,000	1/09/1985	✓	.	✓	.	120,95
256	Notsuke-zaki, Odaitou	JAP	1,924	15/09/2001	✓	.	.	.	177
6	Ashmore Reef	AUS	1,593	2/02/2003	✓	✓	✓	.	154,152
96	Port McArthur	AUS	1,550	15/10/1996	✓	.	.	.	40
341	Lososei Bay	RUS	1,500	9/08/2003	✓	.	.	.	83
335	Daursky Nature Reserve	RUS	1,400	1/06/1995	.	.	✓	.	71
50	Islands off False Orford Ness	AUS	1,078	25/11/1987	.	✓	.	.	41
208	Banzu	JAP	808	15/09/1997	✓	.	✓	.	93
83	Milingimbi coast	AUS	800	NA	.	.	.	.	130
107	SE Gulf of Carpentaria	AUS	745	1/03/1999	.	✓	.	.	51
391	Cebu-Mactan	PHI	710	23/04/1987	.	.	✓	.	120
81	Low Island, Arnhem Bay	AUS	600	15/11/1998	.	✓	.	.	40
42	Fog Bay and adjacent islands	AUS	560	NA	.	.	.	.	40
245	Mikumo-cho Kaigan Kouhaichi	JAP	542	22/08/1996	✓	.	.	.	54
275	Takamatsu, Kahoku Kaigan	JAP	532	22/05/1996	.	.	✓	.	54
213	Fujimae Higata	JAP	512	24/05/1991	✓	.	✓	.	54,53
393	Manila Bay	PHI	500	25/01/1994	.	✓	.	.	169
78	Limmen River mouth	AUS	500	15/07/1998	.	.	.	✓	40
56	Lacepede Islands	AUS	500	7/10/2001	✓	.	.	.	114
406	Day and Ninh Co Estuary	VIE	480	25/04/1994	.	.	✓	.	127
371	Nakdong Estuary	SKO	463	14/08/1998	✓	.	✓	.	116,116
206	Atago-gawa, Kushida-gawa	JAP	431	22/09/1996	✓	.	✓	.	54,95
377	Suncheon Bay	SKO	429	14/05/1998	.	.	✓	.	116
270	Shio-kawa Higata	JAP	403	1/05/2001	✓	.	✓	.	177,177
19	Bynoe Harbour	AUS	400	15/09/1993	✓	.	.	.	40
257	Obitsu-gawa Kakou	JAP	369	16/09/1991	✓	.	.	.	54
372	Namhae	SKO	347	12/08/1998	.	.	✓	.	116
289	Yatsu Higata	JAP	336	15/09/2001	✓	.	✓	.	177,177
240	Kuma-gawa Kakou	JAP	321	10/05/1989	✓	.	✓	.	54,95
242	Makuharinohama	JAP	307	15/09/1998	✓	.	.	.	92
273	Sone Higata	JAP	278	1/05/1998	.	.	✓	.	94
161	Huang He National Nature Reserve	CHI	253	9/09/1991	✓	.	.	.	166
271	Shiraho, Miyara-wan	JAP	224	15/09/1998	✓	.	✓	.	92,95
272	Shira-kawa Kakou	JAP	216	15/09/1998	✓	.	✓	.	92,95
231	Kasai Kaihinkouen	JAP	214	19/05/1996	.	.	✓	.	54
285	Usa Kaigan	JAP	204	1/05/1997	.	.	✓	.	91
252	Nakatsu Kaigan	JAP	200	1/05/2002	.	.	✓	.	178
280	Toukyou-kou Chobokujou	JAP	189	1/05/1997	.	.	✓	.	91
235	Kikuchi-gawa Kakou	JAP	185	8/05/1995	.	.	✓	.	54
205	Arao Kaigan	JAP	183	1/05/2002	.	.	✓	.	178
286	Wajiro Higata	JAP	182	1/05/2001	✓	.	✓	.	177,95

**Table 4.22 (cont.)** Grey-tailed Tattler - sites of international importance

Site Code	Site	Country	Max Count	Date	SM	NB	NM	B	Ref.
230	Kamo-gawa Kakou	JAP	171	1/05/2000	✓	.	✓	.	179,95
243	Manko	JAP	168	24/08/1996	✓	.	.	.	54
368	Kum Estuary	SKO	161	22/05/1998	.	.	✓	.	116
260	Onaga Higata	JAP	151	1/05/1997	✓	.	✓	.	91,91
207	Awase Higata	JAP	151	1/05/2002	.	.	✓	.	178
215	Futtsu	JAP	150	1/05/1998	.	.	✓	.	94
267	Saroma-ko	JAP	142	10/08/1996	✓	.	.	.	54
212	Daimyoujin-gawa Kakou	JAP	138	1/05/1998	.	.	✓	.	94
266	Sanbanze, Tokyo Bay	JAP	137	15/09/1997	✓	.	.	.	93
226	Izumi Kantaku	JAP	131	10/05/1992	.	.	✓	.	54
204	Anou-gawa Kakou, Shitomo-gawa Kakou	JAP	126	1/05/2000	.	.	✓	.	179
284	Umeda-gawa Kakou	JAP	125	8/08/1996	✓	.	.	.	54
222	Ikawazu	JAP	125	1/05/2000	.	.	✓	.	179



**Figure 4.31a** Grey-tailed Tattler – sites of international importance. Numbers refer to the respective site in Table 4.22.

## Ruddy Turnstone

### *Arenaria interpres*

<b>Flyway</b>	Estimate:	<b>35 000</b>
	1% threshold:	350
	Staging threshold:	88
<b>Global</b>	Delany and Scott (2002):	475 000 – 713 000

### Population

Ruddy Turnstones in the EAA Flyway are largely *A. i. interpres*, which also occurs in western Europe, Africa and central Asia. A second subspecies, *A. i. morinella*, is present in the Americas. Therefore in the non-breeding period the Ruddy Turnstone can be found on coasts of all continents except Antarctica. The Ruddy Turnstone of the EAA Flyway and the Central Pacific Flyway are considered to overlap - especially on northward migration.

### Data

Recent large counts of Ruddy Turnstone in northern Australia support a larger population estimate than Watkins (1993) and the minimum of the range proposed by Delany and Scott (2002). During the non-breeding period, approximately 73% of the population in the EAA Flyway occurs in Australia and New Zealand.

### Important Sites

In the non-breeding period, important sites were mostly in Australia (11) and New Zealand (7), with smaller numbers in eastern China (2).

During migration periods, over half the important sites identified for the Ruddy Turnstone were in Japan, with more sites in Japan recognised during northward (26) than southward (12) migration. Three Russian sites were identified during northward migration. The Ruddy Turnstone is widely but thinly dispersed in the Yellow Sea during both migration periods (M. Barter pers. comm.).

### Migration

Information on important sites indicates southward migration through Japan and South Korea, low usage of south-eastern Asia and arrival in Australia concentrated in the north-west (Eighty Mile Beach, Roebuck Bay, Barrow Island, Ashmore Reef and Lacepede Islands). No sites

were identified in the Philippines during southward migration, although southward migration through this area has been reported (Higgins and Davies 1996).

On northward migration from Australia, Ruddy Turnstone may overfly northern Australian sites (Higgins and Davies 1996). Greater abundance of Ruddy Turnstones in Japan on northward than southward migration has been previously reported (Higgins and Davies 1996) and may, in part, be due to Ruddy Turnstone from the Central Pacific Flyway mixing with the EAA Flyway birds.

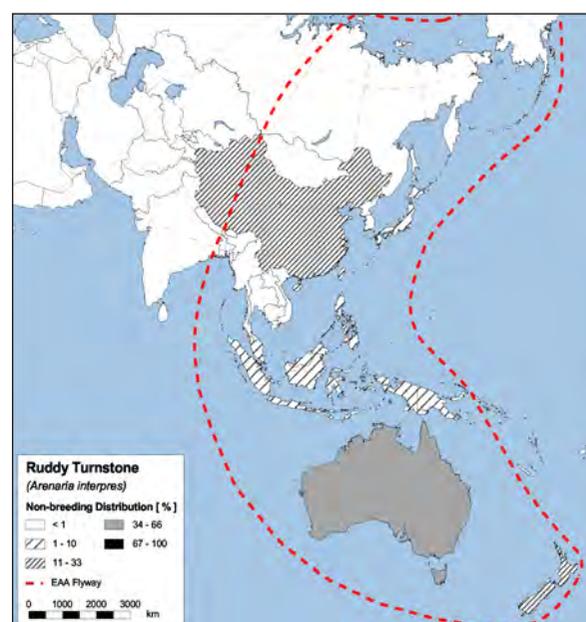
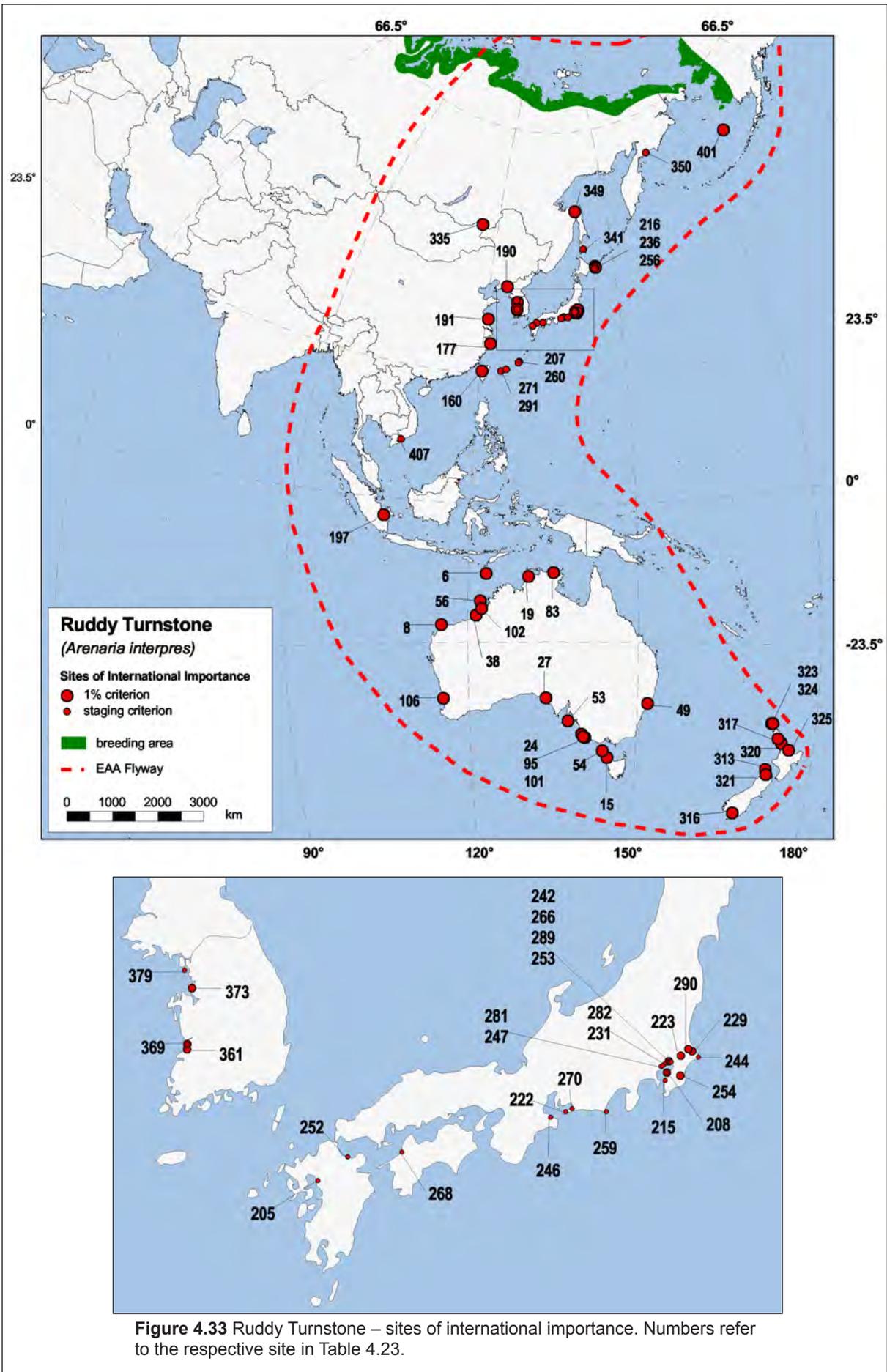


Figure 4.32 Ruddy Turnstone – non-breeding distribution



**Table 4.23** Ruddy Turnstone - sites of international importance

Site Code	Site	Country	Max Count	Date	SM	NB	NM	B	Ref.
401	Pribilof Islands	USA	10,000	NA	✓	.	.	.	70
38	Eighty Mile Beach	AUS	3,480	17/10/1998	✓	✓	.	.	10,99
15	Boullanger Bay/Robbins Passage	AUS	2,800	1/02/1998	.	✓	.	.	8
6	Ashmore Reef	AUS	2,230	24/10/2001	✓	✓	✓	.	152,154
102	Roebuck Bay	AUS	2,060	NA	✓	.	✓	.	99,100
190	Yalu Jiang National Nature Reserve	CHI	1,994	20/05/2000	.	.	✓	.	23
313	Farewell Spit	NZE	1,792	NA	.	✓	.	.	138
8	Barrow Island	AUS	1,733	10/03/2004	✓	✓	✓	.	14,14
373	Namyang Bay	SKO	1,533	1/09/1997	✓	.	.	.	180
323	Parengarenga Harbour	NZE	1,500	NA	.	✓	✓	.	138,138
54	King Island	AUS	1,252	1/01/1993	.	✓	.	.	8
335	Daursky Nature Reserve	RUS	1,200	1/06/1995	.	.	✓	.	71
316	Invercargill	NZE	1,150	NA	.	✓	.	.	138
56	Lacepede Islands	AUS	1,050	15/12/1997	✓	✓	✓	.	176,11
191	Yancheng National Nature Reserve	CHI	919	1/10/1990	✓	.	✓	.	164,18
320	Manukau Harbour	NZE	803	NA	.	✓	.	.	138
229	Kamisu-Chou Takahama	JAP	761	5/05/1998	.	.	✓	.	94
317	Kaipara Harbour	NZE	618	NA	.	✓	.	.	138
101	Rivoli Bay	AUS	616	2/05/1984	✓	.	✓	.	8,49
256	Notsuke-zaki, Odaitou	JAP	598	1/05/2002	✓	.	✓	.	178,178
349	Schastiya Bay	RUS	573	1/09/2002	✓	.	.	.	4
197	Banyuasin Delta	INO	560	1/10/1988	✓	.	.	.	158
266	Sanbanze, Tokyo Bay	JAP	553	1/05/1998	✓	.	✓	.	94,94
223	Inba-numa	JAP	542	1/05/1998	.	.	✓	.	94
49	Hunter Estuary	AUS	520	NA	.	✓	.	.	149
216	Fuuren-ko (Onnetou ohashi)	JAP	505	1/05/2002	✓	.	✓	.	178,178
160	Han-Pao	CHI	500	1/01/1991	.	✓	.	.	169
177	Sanmen Wan	CHI	500	20/01/1995	.	✓	.	.	169
106	Rottneest Island	AUS	480	NA	.	✓	.	.	139
290	Yodaura Suiden	JAP	467	30/04/1989	.	.	✓	.	54
25	Castlereagh Bay	AUS	456	NA	.	.	.	.	130
53	Kangaroo Island, South Australia	AUS	450	1/01/1988	.	✓	.	.	7
361	Dongjin Estuary	SKO	450	1/05/1998	.	.	✓	.	180
95	Port MacDonnell coast	AUS	443	31/01/1986	.	✓	.	.	8
24	Carpenter Rocks, Pelican Point	AUS	438	2/11/1983	.	✓	✓	.	8,49
254	Naruto-machi Suiden	JAP	437	1/05/1998	.	.	✓	.	94
321	Motueka Estuary	NZE	434	NA	.	✓	.	.	138
208	Banzu	JAP	430	15/09/2001	✓	.	✓	.	177,177
325	Tauranga Harbour	NZE	402	NA	.	✓	.	.	138
369	Mankyung Estuary	SKO	400	1/05/1998	✓	.	✓	.	180,117
27	Ceduna Bays	AUS	385	1/02/2000	.	✓	.	.	173
324	Rangaunu Harbour	NZE	372	NA	.	✓	.	.	138
19	Bynoe Harbour	AUS	350	15/09/1999	✓	.	.	.	40
231	Kasai Kaihinkouen	JAP	305	15/09/1996	✓	.	✓	.	54,54
215	Futtsu	JAP	300	1/05/1998	.	.	✓	.	94
247	Morigasakinohana	JAP	249	17/05/1996	.	.	✓	.	54

**Table 4.23 (cont.)** Ruddy Turnstone - sites of international importance

Site Code	Site	Country	Max Count	Date	SM	NB	NM	B	Ref.
289	Yatsu Higata	JAP	243	1/05/2001	✓	.	✓	.	177,177
270	Shio-kawa Higata	JAP	239	1/05/2000	.	.	✓	.	179
253	Narashino-akanehama	JAP	186	1/05/1998	.	.	✓	.	94
379	Yong Jong Island	SKO	180	1/05/1997	.	.	✓	.	180
222	Ikawazu	JAP	178	1/05/1998	.	.	✓	.	94
260	Onaga Higata	JAP	171	1/05/1998	✓	.	✓	.	94,94
281	Toukyou-kou, Yatyouden Shuuhen	JAP	159	1/05/1997	.	.	✓	.	91
244	Matsugishi-higata	JAP	156	1/05/1998	.	.	✓	.	94
242	Makuharinohama	JAP	150	15/09/1997	✓	.	.	.	93
350	Skobeleva Bay	RUS	145	25/05/1998	.	.	✓	.	66
246	Miyagawakakou, Sotoshirotagawakou	JAP	144	4/05/1998	.	.	✓	.	94
259	Omaezaki-kaigan	JAP	134	4/05/1996	.	.	✓	.	54
271	Shiraho, Miyara-wan	JAP	133	15/09/1998	✓	.	✓	.	92,92
207	Awase Higata	JAP	130	15/09/2001	✓	.	.	.	177
282	Tyuuou-bouhatei Uchi-Sotogawa Umetatechi	JAP	121	28/04/1996	✓	.	✓	.	92,92
407	Hoa Trinh	VIE	103	1/04/2000	.	.	✓	.	118
252	Nakatsu Kaigan	JAP	101	1/05/1998	.	.	✓	.	94
341	Lososei Bay	RUS	100	30/05/1979	.	.	✓	.	123
205	Arao Kaigan	JAP	100	1/05/2000	.	.	✓	.	179
268	Shigenobu-gawa Kakou	JAP	98	1/05/1993	.	.	✓	.	54
236	Kiritappu Shitsugen	JAP	93	16/05/1996	.	.	✓	.	54
291	Yonaha-wan	JAP	93	15/09/2001	✓	.	.	.	177

## Asian Dowitcher

### *Limnodromus semipalmatus*

<b>Flyway</b> Estimate:	<b>23 000</b>
1% threshold:	230
Staging threshold:	57
<b>Global</b> Delany and Scott (2002):	23 000

### Population

The Asian Dowitcher is restricted to the EAA Flyway and no subspecies are recognised. It breeds in several small, scattered areas in central Asia, from the steppe zone of Western Siberia to northeastern China (Mauersberg *et al.* 1982), and is considered to spend the non-breeding period in parts of south-eastern Asia. It is a poorly known species and is listed as Near Threatened (Birdlife International 2001).

### Data

The population estimate is based upon large numbers reported from Indonesia, including a single count of 13 000 birds made during southward migration. Over 80% of the population occurs in Indonesia during the non-breeding period (Table 4.24). The population estimate for the Asian Dowitcher has increased as more data have become available.

### Important Sites

More important sites were recognised during migration periods than during the non-breeding period, possibly due to poor coverage in Indonesia during the latter period. The count made in Roebuck Bay (Australia) during northward migration was of birds roosting in mangrove creeks and only a small portion of this extensive habitat was surveyed. It is therefore not known if more birds were present, but it was the highest count of Asian Dowitchers ever made in Australia and was possibly a pre-migratory aggregation. Other sites identified during migration periods were in Russia, China, Vietnam, Thailand, Malaysia and Indonesia.

### Migration

The distribution of important sites indicates that southward migration occurs through the Daursky Nature Reserve (Russia), eastern China and several countries in south-eastern Asia, with the Indonesian island of Sumatra of particular importance. Within Sumatra, Banyuasin Delta is of great significance in this period. In the non-breeding period, Indonesia, Malaysia and Thailand remain important. Silvius (1986) considered that the main non-breeding area for the species

was the south coast of Sumatra. The single high count from Australia during northward migration suggests that northern Australia may support more birds during the non-breeding period than indicated by existing count data.

Northward migration appears to follow a similar route as southward migration.

**Table 4.24** Distribution of the Asian Dowitcher in the non-breeding period

Country	Estimate
Indonesia	20 000
Thailand	600
Australia	500
China	500
Malaysia	500
Papua New Guinea	500
Philippines	300
India	150
other countries	230
<b>TOTALS:</b>	<b>23 280</b>



**Figure 4.34** Asian Dowitcher – non-breeding distribution

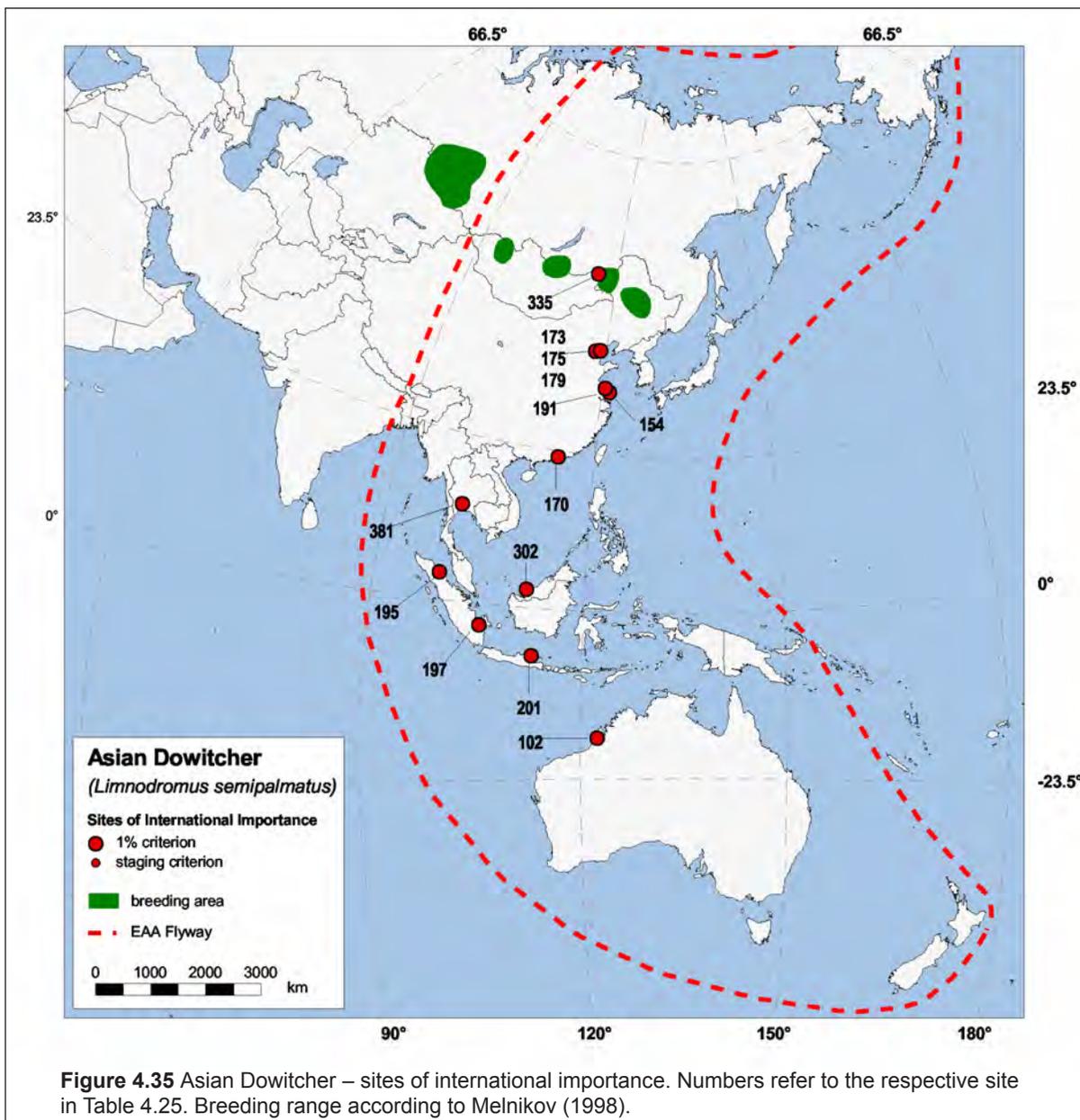


Table 4.25 Asian Dowitcher - sites of international importance

Site Code	Site	Country	Max Count	Date	SM	NB	NM	B	Ref.
197	Banyuasin Delta	INO	13,000	1/11/1988	✓	✓	✓	.	158,141,43
195	Bagan Percut - Sungai Ular	INO	2,002	15/04/1997	.	.	✓	.	43
154	Dongsha Islands	CHI	1,320	1/09/1997	✓	.	✓	.	162,162
173	North Bo Hai Wan	CHI	1,153	2/05/2002	.	.	✓	.	20
179	Shi Jiu Tuo/Daqing He	CHI	1,100	12/05/1994	✓	.	✓	.	18,47
175	North-west Bo Hai Wan	CHI	966	12/04/2000	.	.	✓	.	20
191	Yancheng National Nature Reserve	CHI	945	1/09/1997	✓	.	✓	.	18,18
201	Ujung Pangkah	INO	930	18/01/1990	.	✓	.	.	169
335	Daursky Nature Reserve	RUS	800	1/06/1995	.	.	✓	.	71
381	Inner Gulf of Thailand	THA	600	15/01/2000	.	✓	.	.	133
302	Pulau Buit	MAL	470	1/09/1985	✓	.	.	.	56
102	Roebuck Bay	AUS	414	30/03/2000	.	.	✓	.	132
170	Mai Po Marshes	CHI	340	NA	.	.	✓	.	120

## Great Knot

### *Calidris tenuirostris*

<b>Flyway</b>	Estimate:	<b>380 000</b>
	1% threshold:	3 800
	Staging threshold:	950
<b>Global</b>	Delany and Scott (2002):	382 000 – 385 000

### Population

The monotypic Great Knot is restricted to the EAA Flyway. It was considered to be a rare species until the early 1980s when it was found to be abundant in northern Australia during the non-breeding period. It breeds in eastern Russia north of the Kamchatka Peninsula.

### Data

The Flyway population estimate is the same as the previous estimate of Delany and Scott (2002). Australia supports about 95% of the population in the non-breeding period (Table 4.26).

### Important Sites

All important sites identified during the non-breeding period were in northern Australia. During migration periods, important sites were located in Russia, South Korea, China and Australia, and the distribution of important sites differed between northward and southward migration periods. In the Yellow Sea area (South Korea and China), 15 sites were identified during northward migration compared with 9 during southward migration. The concentration of important sites in the Yellow Sea of China and South Korea makes it likely that additional important sites exist in North Korea.

In contrast to the records around the Yellow Sea, all three of the sites listed for eastern Russia were important during southward migration, with only one of these, the Moroshechnaya River Estuary, also being important, but with a smaller count, during northward migration. The counts made on the Moroshechnaya River Estuary are estimates of the number of birds that utilise the site over an extended period of time.

### Migration

The Great Knot is believed to be able to fly non-stop between the Yellow Sea and northern Australia (Barter and Wang 1990), and the distribution of important sites supports this, with none between eastern China and northern Australia. Despite this, the species is known to occur regularly in small numbers on migration in Japan, the

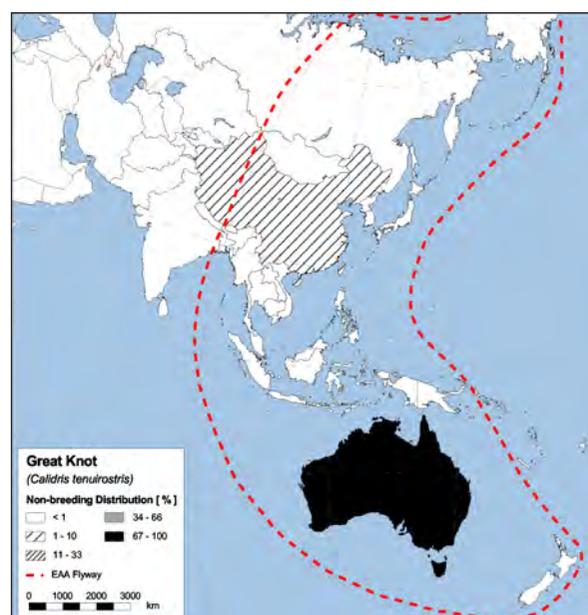
Philippines, Indonesia and Malaysia (Higgins and Davies 1996).

The distribution of important sites indicates that there are differences between southward and northward migration. In particular, Great Knots use sites in eastern Russia more during southward than northward migration, but the reverse is true of the Yellow Sea of South Korea and north-eastern China (Won 1991, Barter 2002). An estimated 80% of the population passes through the Yellow Sea on northward migration, but much lower numbers on southward migration (Barter 2002). In addition, higher counts have been reported during southward than northward migration at Mai Po Marshes (China, Chalmers 1986), where numbers increased during the early 1980s.

On southward migration, the birds are able to forage in eastern Russia as the first and possibly

**Table 4.26** Distribution of the Great Knot in the non-breeding period

Country	Estimate
Australia	360 000
China	10 000
Papua New Guinea	3 000
Philippines	2 500
Indonesia	2 000
other countries	1 610
<b>TOTALS:</b>	<b>379 110</b>



**Figure 4.36** Great Knot – non-breeding distribution

only stop-over en route to northern Australia.

On northward migration the birds have come from northern Australia and, having completed a flight of over 5 000 km, need to spend a long time foraging in the Yellow Sea before proceeding north. At this time the coastline of eastern Russia may still be ice-bound. The birds fly direct from the Yellow Sea to the breeding grounds and arrive earlier than many other shorebirds (late May). At this time foraging may be difficult because of snow and ice and the birds require food reserves (stored as body fat) until they are able to feed.

The increase in numbers of Great Knot on southward migration through the Mai Po Marshes (China) in the mid-1980s (Chalmers 1986) could have a number of causes, but the Great Knot's reliance on a small number of sites during migration makes it particularly vulnerable to degradation or loss of those sites. An increase in numbers of Great Knot at intermediate sites is likely to occur if the birds are not able to effectively use their primary staging sites.

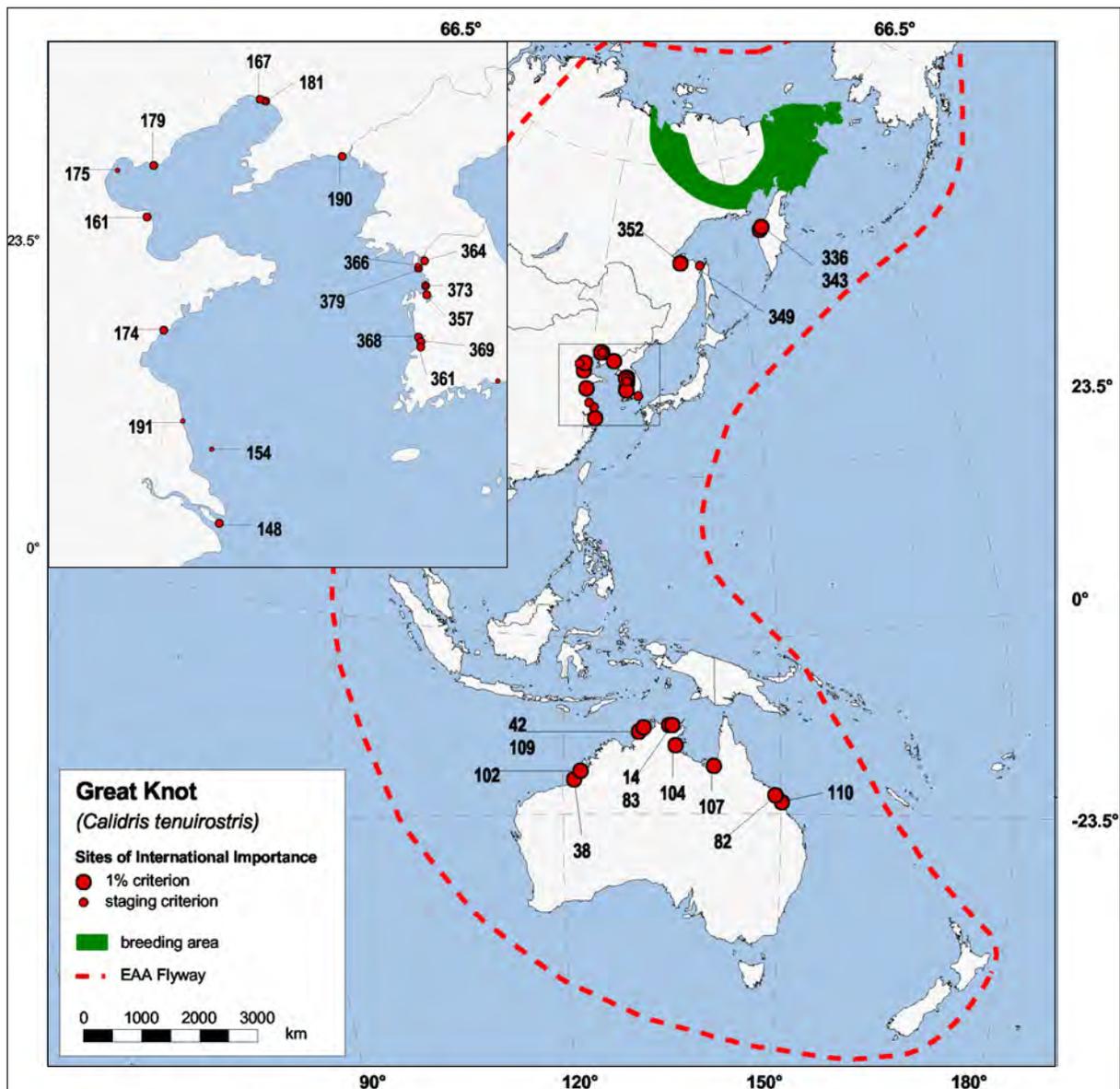


Figure 4.37 Great Knot – sites of international importance. Numbers refer to the respective site in Table 4.27. Breeding range according to Tomkovich (1997).

**Table 4.27** Great Knot - sites of international importance

Site Code	Site	Country	Max Count	Date	SM	NB	NM	B	Ref.
38	Eighty Mile Beach	AUS	158,082	17/10/1998	✓	.	.	.	10
343	Moroshechnaya River Estuary	RUS	100,000	15/08/1990	✓	.	✓	.	63,60
107	SE Gulf of Carpentaria	AUS	72,333	1/03/1999	✓	✓	✓	.	51,49,49
361	Dongjin Estuary	SKO	60,000	1/05/1998	✓	.	✓	.	180,18
369	Mankyung Estuary	SKO	59,000	3/05/1999	✓	.	✓	.	18,18
190	Yalu Jiang National Nature Reserve	CHI	54,178	2/05/1999	.	.	✓	.	23
357	Asan Bay	SKO	34,000	NA	.	.	✓	.	18
181	Shuangtaizihkou N. N. Reserve	CHI	24,915	12/05/1998	✓	.	✓	.	24,1
102	Roebuck Bay	AUS	22,600	NA	✓	.	.	✓	99,11
104	Roper River area	AUS	21,400	NA	.	✓	.	.	99
373	Namyang Bay	SKO	21,000	1/05/1998	✓	.	✓	.	180,103
368	Kum Estuary	SKO	18,850	21/04/1998	.	.	✓	.	116
167	Linghekou	CHI	17,540	29/04/1999	.	.	✓	.	21
161	Huang He National Nature Reserve	CHI	12,816	27/04/1998	.	.	✓	.	181
42	Fog Bay and adjacent islands	AUS	10,000	25/12/1992	.	✓	.	.	40
352	Tugurskiy Bay	RUS	9,750	28/08/1990	✓	.	.	.	129
364	Han River	SKO	7,700	1/05/2000	.	.	✓	.	141
174	Northern Jiangsu Coastline	CHI	6,700	2/05/2004	.	.	✓	.	16
379	Yong Jong Island	SKO	6,000	1/09/1998	✓	.	✓	.	180,117
148	Chongming Dongtan N. N. Reserve	CHI	5,761	31/03/1996	.	.	✓	.	27
109	Shoal Bay: Tree Pt to Lee Pt	AUS	5,500	7/11/1982	✓	.	.	.	8
14	Boucat Bay	AUS	5,500	25/03/1999	.	.	✓	.	40
336	Khairyuzova Bay	RUS	4,500	23/07/1983	✓	.	.	.	109
25	Castlereagh Bay	AUS	4,500	31/03/1999	.	.	✓	.	40
110	Shoalwater Bay and Broad Sound	AUS	4,200	NA	.	✓	.	.	99
82	Mackay Town Beach	AUS	4,000	NA	.	✓	.	.	99
179	Shi Jiu Tuo/Daqing He	CHI	4,000	13/05/1994	.	.	✓	.	18
175	North-west Bo Hai Wan	CHI	3,610	12/04/2000	.	.	✓	.	20
366	Kanghwa Island	SKO	3,300	1/05/1998	✓	.	✓	.	180,116
191	Yancheng National Nature Reserve	CHI	2,206	1/09/1997	✓	.	.	.	162
154	Dongsha Islands	CHI	2,206	1/09/1997	✓	.	.	.	162
349	Schastiya Bay	RUS	1,374	1/09/2002	✓	.	.	.	4
371	Nakdong Estuary	SKO	1,240	1/09/1983	✓	.	.	.	141

## Red Knot

### *Calidris canutus*

<b>Flyway</b>	Estimate:	<b>220 000</b>
	1% threshold:	2 200
	Staging threshold:	550
<b>Global</b>	Delany and Scott (2002):	1 090 000

### Population

The Red Knot has a scattered breeding distribution in the Arctic and six subspecies are recognised: *C. c. canutus* (central Siberia), *C. c. rogersi* (eastern Siberia), *C. c. piersmai* (New Siberian Islands), *C. c. roselaari* (north-western Alaska), *C. c. rufa* (Canadian Arctic) and *C. c. islandica* (Greenland and Canadian high Arctic). *C. c. piersmai* has only recently been recognised (Tomkovich 2001) and occurs with *C. c. rogersi* in the EAA Flyway, although some *C. c. canutus* may be present. *C. c. piersmai* may be the subspecies most commonly encountered in New Zealand and eastern Australia.

### Data

The proposed Flyway population estimate combines the two subspecies and is the same as that offered by Delany and Scott (2002), but is less than the 255 000 of Watkins (1993). It is believed that the higher estimate was due to the inclusion of passage birds in some counts (P. Driscoll, pers. comm.). Australia and New Zealand support 93% of Red Knots in the EAA Flyway during the non-breeding period (Table 4.28).

### Important Sites

All important sites in the non-breeding period were in Australia and New Zealand. Outside Australasia, important sites were identified during migration periods in eastern Russia and the Yellow Sea area, and more were recognised during northward migration (13) compared with southward migration (6).

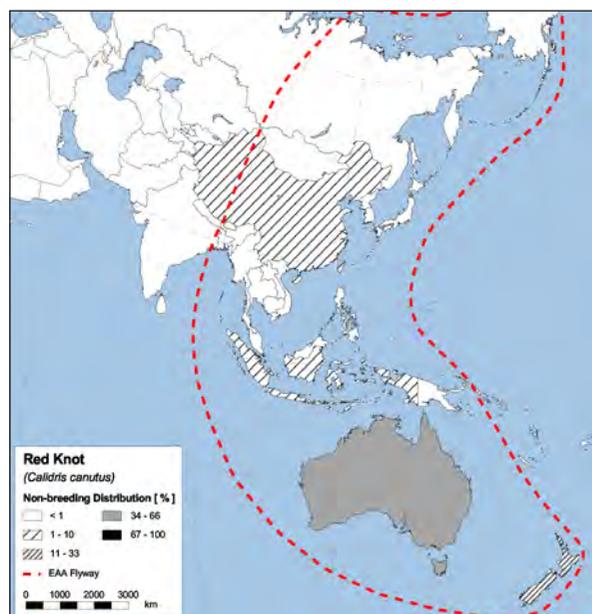
**Table 4.28** Distribution of the Red Knot in the non-breeding period

Country	Estimate
Australia	135 000
New Zealand	68 000
China	10 000
Indonesia	5 000
other countries	960
<b>TOTALS:</b>	<b>218 960</b>

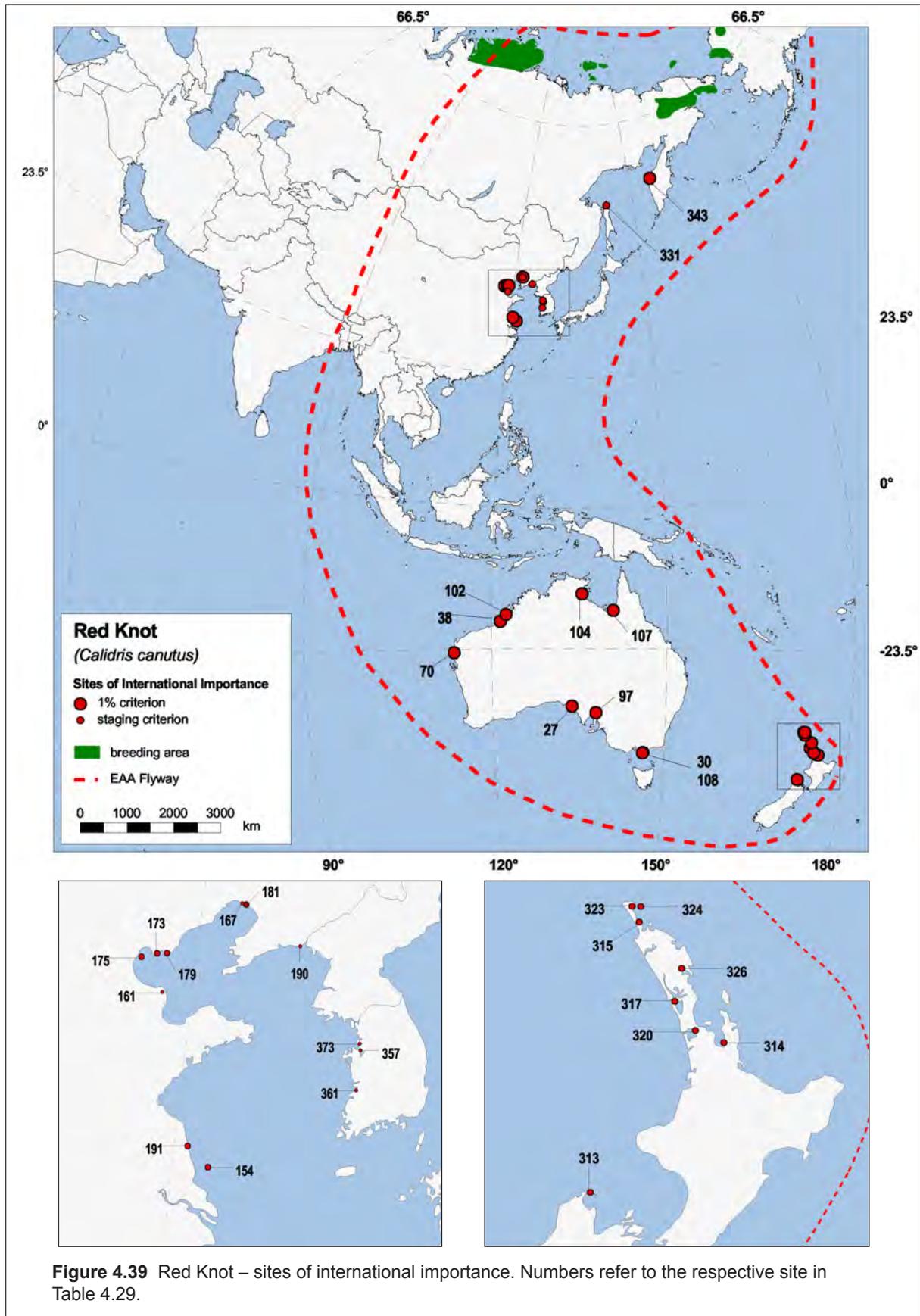
### Migration

The Red Knot is capable of flying non-stop between north-eastern China and northern Australia. Southward migration is believed to differ from northward migration, with the southward route passing over the Pacific Ocean and the northward route along the east Asian coast (Higgins and Davies 1996). The distribution of important sites supports this. The species relies on a small number of sites in both migration periods.

Numbers peak in northern Australia during southward migration, with birds passing through the eastern Gulf of Carpentaria destined for south-eastern Australia and New Zealand. In contrast, birds that pass through north-western Australia disperse along the northern coastline and to southern Western and South Australia, with apparently little movement from north-western Australia to south-eastern Australia and New Zealand within a year (Higgins and Davies 1996). On northward migration, birds from New Zealand again stage in the Gulf of Carpentaria, but birds from southern Australia may overfly northern Australia en route to eastern Asia.



**Figure 4.38** Red Knot – non-breeding distribution



**Table 4.29** Red Knot - sites of international importance

Site Code	Site	Country	Max Count	Date	SM	NB	NM	B	Ref.
38	Eighty Mile Beach	AUS	80,700	NA	✓	.	.	.	99,10
313	Farewell Spit	NZE	24,227	NA	.	✓	.	.	138
107	SE Gulf of Carpentaria	AUS	23,657	1/03/1999	.	✓	.	.	51
320	Manukau Harbour	NZE	22,433	NA	.	✓	.	✓	138,138
317	Kaipara Harbour	NZE	16,910	NA	.	✓	.	.	138
175	North-west Bo Hai Wan	CHI	14,277	12/04/2000	.	.	✓	.	20
323	Parengarenga Harbour	NZE	13,500	NA	.	✓	.	.	138
102	Roebuck Bay	AUS	11,200	NA	.	✓	✓	.	99,49,100
173	North Bo Hai Wan	CHI	9,358	2/05/2002	.	.	✓	.	20
154	Dongsha Islands	CHI	8,140	1/09/1997	✓	.	.	.	162
314	Firth of Thames	NZE	7,819	NA	.	✓	.	.	142
30	Corner Inlet	AUS	7,110	31/01/1987	.	✓	.	.	8
179	Shi Jiu Tuo/Daqing He	CHI	5,000	14/05/1992	.	.	✓	.	18
97	Port Pirie coast	AUS	4,800	23/01/2000	.	✓	.	.	173
181	Shuangtaizihekou N. N. Reserve	CHI	4,200	19/08/1999	✓	.	✓	.	18,188
326	Whangarei Harbour	NZE	4,198	NA	.	✓	.	.	138
191	Yancheng National Nature Reserve	CHI	3,169	NA	.	.	✓	.	18
104	Roper River area	AUS	3,100	NA	.	✓	.	.	59
343	Moroshechnaya River Estuary	RUS	3,000	15/05/1998	.	.	✓	.	68
315	Houhora Harbour	NZE	2,855	NA	.	✓	.	.	138
27	Ceduna Bays	AUS	2,788	1/02/2000	.	✓	.	.	173
70	Lake MacLeod	AUS	2,566	28/09/1987	✓	.	.	.	90
324	Rangaunu Harbour	NZE	2,500	NA	.	✓	.	.	138
361	Dongjin Estuary	SKO	1,500	1/05/1998	.	.	✓	.	180
190	Yalu Jiang National Nature Reserve	CHI	1,499	2/05/1999	.	.	✓	.	23
331	Baikal Bay	RUS	1,000	10/08/1979	✓	.	.	.	123
357	Asan Bay	SKO	1,000	1/05/1998	.	.	✓	.	180
167	Linghekou	CHI	969	29/04/1999	.	.	✓	.	21
161	Huang He National Nature Reserve	CHI	756	27/04/1998	.	.	✓	.	181
373	Namyang Bay	SKO	580	1/05/1997	.	.	✓	.	180

## Sanderling

### *Calidris alba*

<b>Flyway</b>	Estimate:	<b>22 000</b>
	1% threshold:	220
	Staging threshold:	55
<b>Global</b>	Delany and Scott (2002):	620 000 – 695 000

Northward migration is reported to be similar to southward migration, but the species makes less use of northern Australia (Higgins and Davies 1996).

### Population

The monotypic Sanderling has a small breeding distribution in the high Arctic but disperses widely in the non-breeding period. No subspecies are recognised. The species is particularly abundant in the Americas and in Africa/Eurasia, with over 90% of the global population in these two regions based upon the estimates of Delany and Scott (2002).

### Data

The Flyway population estimate is the same as that of Delany and Scott (2002). Nearly half the population spends the non-breeding period in Australia (Table 4.30).

### Important Sites

Important sites during the non-breeding period were in Australia (12), China (1) and Japan (2). Most of the sites in Australia were in the south.

There were similar numbers of important sites in the two migration periods, with the majority of sites in Japan (10).

Two important sites in southern Australia, Green Point and Rivoli Bay (South Australia), were identified during the breeding period. These were presumably non-breeding birds that remained in the extreme south of the species' non-breeding range. This has been reported in other flyways (Higgins and Davies 1996).

### Migration

According to Higgins and Davies (1996), the Sanderling migrates south through eastern China, South Korea and Japan, with small numbers recorded in south-eastern Asia, suggesting that the birds overfly this region. The main region of arrival in Australia is in the north-west, but the non-breeding period distribution of the species within Australia has a southerly bias. The high counts in southern Western Australia that occur late in this period may be part of a westward movement prior to departure (Higgins and Davies 1996).

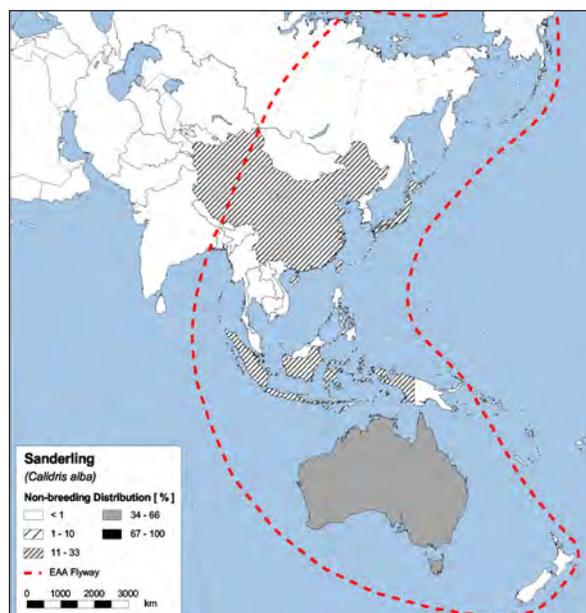


Figure 4.40 Sanderling – non-breeding distribution

Table 4.30 Distribution of the Sanderling in the non-breeding period

Country	Estimate
Australia	10 000
Indonesia	5 000
China	3 100
Japan	2 500
other countries	870
<b>TOTALS:</b>	<b>21 470</b>

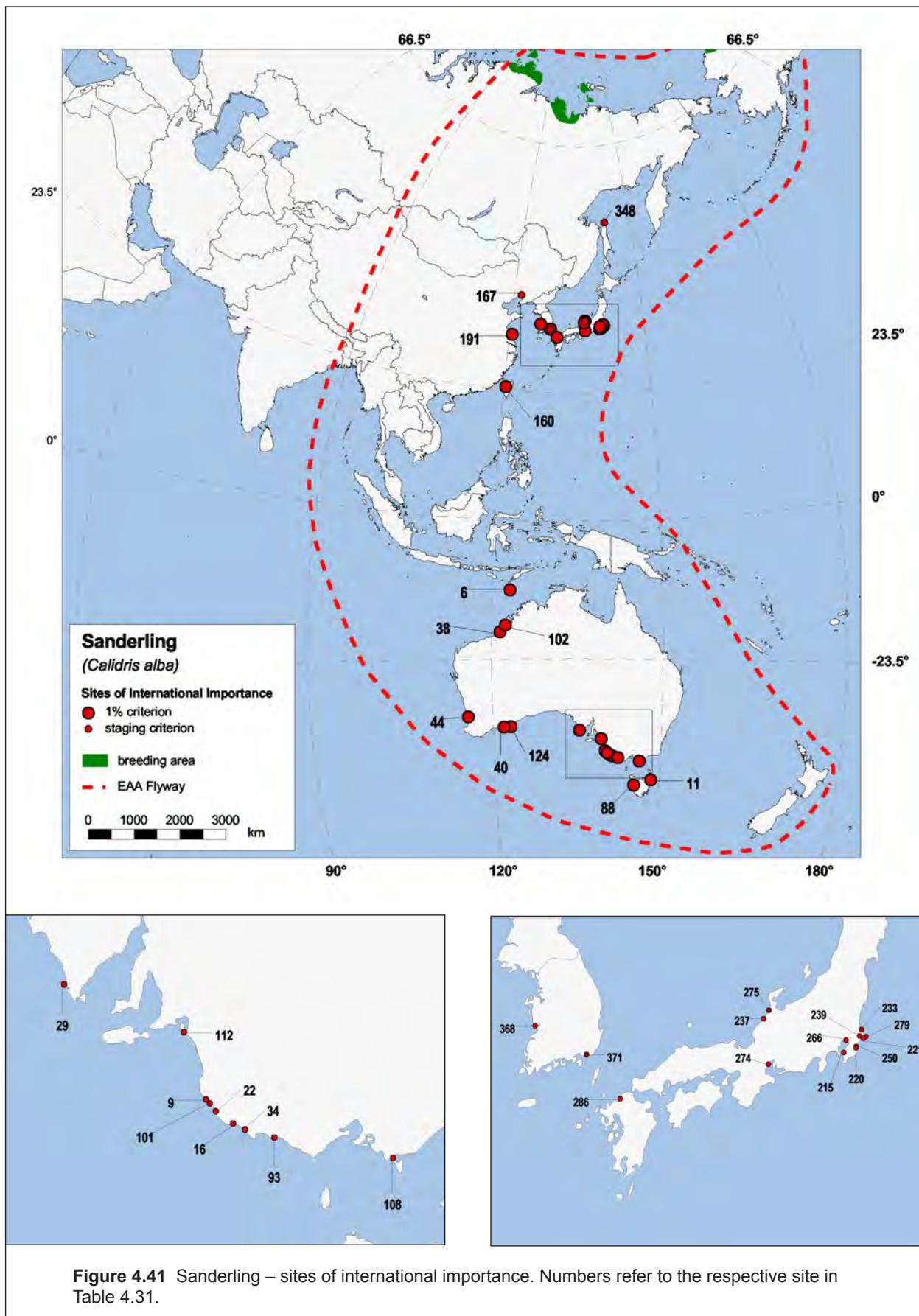


Figure 4.41 Sanderling – sites of international importance. Numbers refer to the respective site in Table 4.31.

**Table 4.31** Sanderling - sites of international importance

Site Code	Site	Country	Max Count	Date	SM	NB	NM	B	Ref.
191	Yancheng National Nature Reserve	CHI	3,095	1/05/1990	✓	.	✓	.	164,18
38	Eighty Mile Beach	AUS	2,230	17/10/1998	✓	.	.	.	10
102	Roebuck Bay	AUS	1,510	NA	✓	.	.	.	99,55
371	Nakdong Estuary	SKO	1,300	1/09/1983	✓	.	✓	.	141,117
6	Ashmore Reef	AUS	1,132	2/02/2003	.	✓	.	.	154
101	Rivoli Bay	AUS	1,108	4/07/1984	.	.	.	✓	8
16	Brown Bay (Green Point)	AUS	1,106	7/04/1984	✓	.	✓	.	8,49
112	The Coorong and Coorong NP	AUS	930	NA	.	.	.	✓	99,49
239	Kujukuri Hama	JAP	881	15/09/1997	✓	.	.	.	93
108	Shallow Inlet/Sandy Point	AUS	769	1/08/1999	✓	✓	.	.	8
279	Tone-gawa Kakou	JAP	700	11/08/1996	✓	.	.	.	54
220	Ichinomiya-gawa Kakou	JAP	600	15/09/1997	✓	.	✓	.	93,93
250	Nabaki-gawa, Hori-kawa	JAP	576	1/05/2002	✓	.	✓	.	178,178
160	Han-Pao	CHI	570	21/01/1992	.	✓	.	.	169
29	Coffin Bay National Park	AUS	570	1/02/2000	✓	✓	✓	.	173,49,49
34	Discovery Bay Conservation Park	AUS	560	1/01/1993	.	✓	.	.	8
93	Port Fairy to Warrnambool coast	AUS	550	13/02/1983	.	✓	.	.	8
124	Yokinup Bay, Cape Arid NP	AUS	550	11/01/2000	.	✓	.	.	11
237	Komaiko Kaigan	JAP	500	1/05/1997	✓	.	✓	.	91,91
44	Garden Island	AUS	485	1/01/1993	.	✓	.	.	8
88	Ocean Beach, Strahan	AUS	450	2/11/1985	.	✓	✓	.	8,140
274	Suzuka-gawa Kakou, Suzuka-hasen Kakou	JAP	430	1/05/1998	.	.	✓	.	94
275	Takamatsu, Kahoku Kaigan	JAP	395	1/05/2002	✓	.	✓	.	178,178
40	Esperance Bay	AUS	368	1/01/2000	.	✓	.	.	11
22	Canunda National Park	AUS	360	2/10/1985	✓	✓	.	.	8,49
368	Kum Estuary	SKO	300	1/09/1999	✓	.	.	.	18
221	Iioka Kaigan	JAP	294	15/09/1998	✓	.	.	.	92
9	Beachport National Park	AUS	293	27/02/1981	.	✓	.	.	8
215	Futtsu	JAP	278	1/05/1998	.	.	✓	.	94
11	Blanche Point	AUS	266	12/11/1998	.	✓	.	.	36
233	Kashimanada	JAP	252	1/05/1998	.	.	✓	.	94
286	Wajiro Higata	JAP	241	1/01/1999	.	✓	.	.	179
266	Sanbanze, Tokyo Bay	JAP	238	1/12/1999	.	✓	.	.	179
167	Linghekou	CHI	105	29/04/1999	.	.	✓	.	21
348	Sakhalinsky Bay	RUS	60	2/08/1979	✓	.	.	.	123

## Red-necked Stint

### *Calidris ruficollis*

<b>Flyway</b>	Estimate:	<b>325 000</b>
	1% threshold:	3 250
	Staging threshold:	813
<b>Global</b>	Delany and Scott (2002):	315 000

### Population

The monotypic Red-necked Stint is restricted to the EAA Flyway.

### Data

During the non-breeding period, over 80% of the population of the Red-necked Stint occurs in Australia, with small numbers in China, the Philippines, Malaysia and Indonesia (Table 4.33).

Count data suggest that numbers of Red-necked Stints in Australia during the early 1980s were high (Rogers and Gosbell 2006). Existing estimates (e.g. Watkins 1993) were developed on the basis of count data from the 1980s. The population appears to have declined following poor breeding success in the early 1990s, but to have increased in recent years (Rogers and Gosbell 2006). The Flyway population developed in this review draws heavily on the 1990s data and may not entirely account for the recent recovery of the population size.

### Important Sites

All important sites in the non-breeding period were in Australia, while sites important during migration periods were in Australia, Indonesia, Malaysia, Thailand, China, South Korea and Russia.

Similar numbers of important sites were recognised on northward (25) and southward (22) migration, but the pattern varied between countries. In Australia there were more sites identified as important on southward than northward migration (8 compared with 2), whereas there were fewer sites identified as important during southward compared with northward migration in South Korea (2:8) and China (2:6).

In Russia, there were 6 sites identified as important during southward migration compared with 3 during northward migration, but levels of abundance varied between sites. On the Moroshechnaya River Estuary (Russia), estimates of total numbers of birds were greater on southward (300 000) than northward migration (100 000), whereas the highest estimates from Daursky Nature Reserve (Russia) were made on northward

migration (170 000 compared with 45 000).

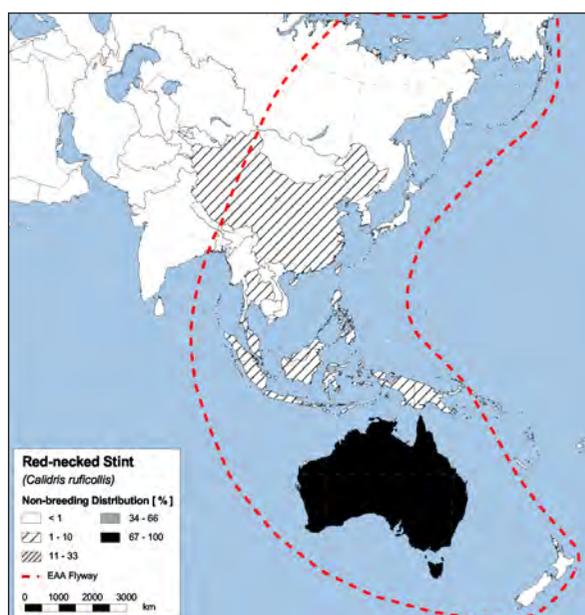
Several sites in southern Australia supported internationally important numbers during the breeding period.

### Migration

The Red-necked Stint is widespread in eastern and south-eastern Asia during migration, but there are differences in distribution and abundance between the two periods. In Brunei, South Korea and Japan the species is more abundant during southward migration. On the west coast of peninsula Malaysia, Mai Po Marshes (China) and on the east coast of China the species is more abundant on northward migration. In Australia, the north-west is

**Table 4.32** Distribution of the Red-necked Stint in the non-breeding period

Country	Estimate
Australia	260 000
Philippines	12 000
China	12 000
Indonesia	7 000
Malaysia	6 000
Papua New Guinea	4 000
Thailand	4 000
Vietnam	2 000
other countries	2 100
<b>TOTALS:</b>	<b>309 100</b>

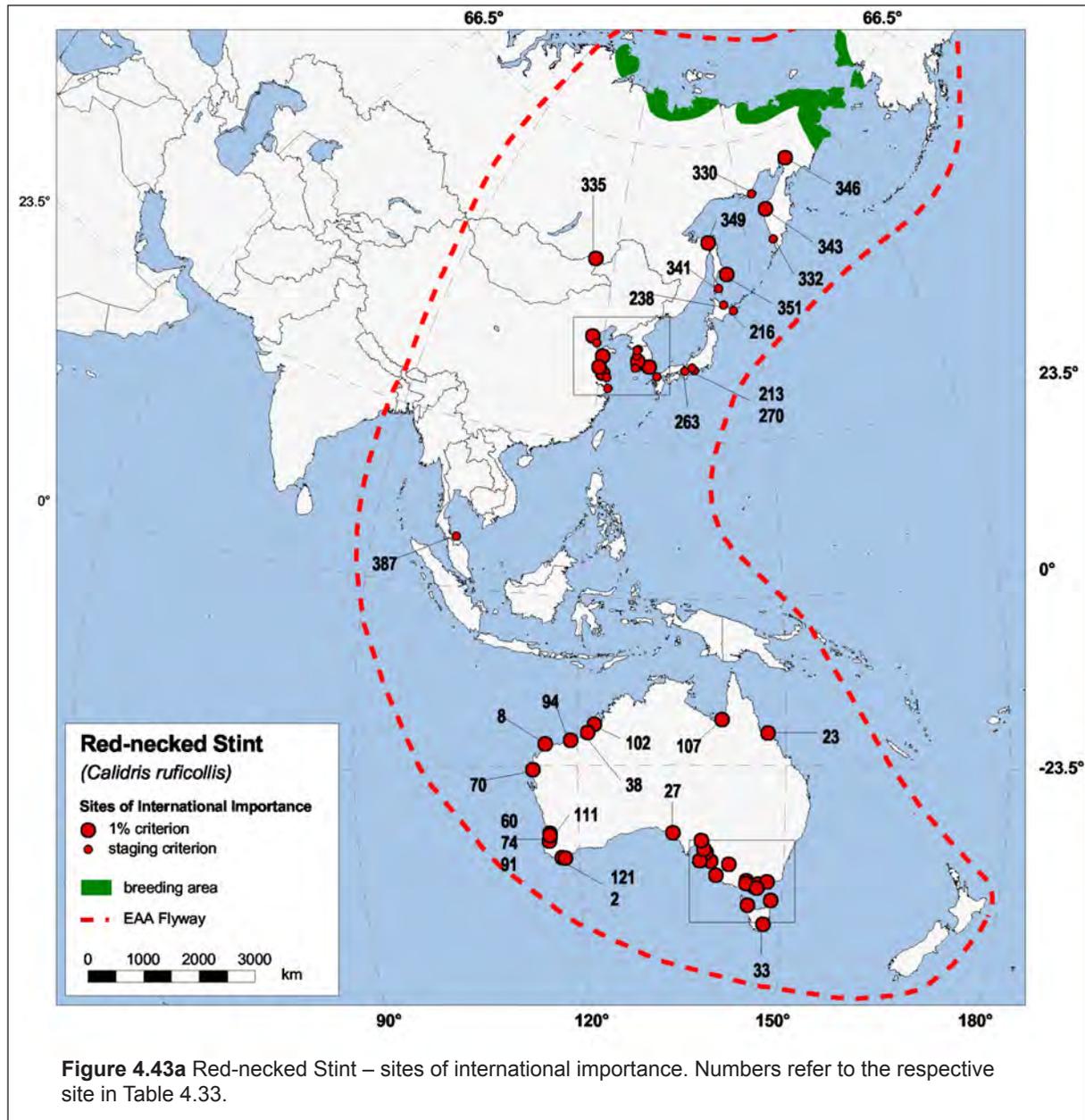


**Figure 4.42** Red-necked Stint – non-breeding distribution

used more on southward than northward migration, and birds regularly cross the interior of the country between the north-west and south-east (Higgins and Davies 1996).

The distribution of important sites during the migration periods largely supports these observations on seasonal differences in abundance. On available data, almost all Red-necked Stints

appear to migrate south through the Moroshechnaya River Estuary. On northward migration, the greater reliance on the Yellow Sea and on inland sites in Russia may occur because the frozen coastal areas in Russia. Overland migration from the Yellow Sea to the breeding grounds may be more important on northward than southward migration.



**Table 4.33** Red-necked Stint - sites of international importance

Site Code	Site	Country	Max Count	Date	SM	NB	NM	B	Ref.
343	Moroshechnaya River Estuary	RUS	300,000	NA	✓	.	✓	.	63,61
38	Eighty Mile Beach	AUS	60,000	NA	✓	.	.	.	99,10
112	The Coorong and Coorong NP	AUS	46,067	1/02/2003	.	✓	.	.	73
107	SE Gulf of Carpentaria	AUS	26,971	1/03/1999	.	✓	.	.	51
36	Eastern Port Phillip Bay	AUS	24,552	17/02/2001	.	✓	.	.	148
335	Daursky Nature Reserve	RUS	23,850	14/06/1999	✓	.	.	.	72
94	Port Hedland Saltworks	AUS	23,000	NA	.	.	.	✓	99,11
30	Corner Inlet	AUS	22,720	7/02/2001	✓	✓	✓	.	148,49
102	Roebuck Bay	AUS	19,800	NA	✓	.	.	.	99
121	Wilson Inlet	AUS	15,252	1/01/1993	.	✓	.	.	8
15	Boullanger Bay/Robbins Passage	AUS	12,595	2/02/2002	.	✓	.	.	147
91	Peel-Harvey system	AUS	12,131	1/02/2003	.	✓	.	.	45
74	Lake Preston	AUS	11,700	13/11/1999	.	✓	.	.	42
371	Nakdong Estuary	SKO	10,900	1/09/1983	✓	.	✓	.	141,117
346	Penzhina River mouth	RUS	10,412	28/07/2002	✓	.	.	.	65
191	Yancheng National Nature Reserve	CHI	10,073	28/04/2001	✓	.	✓	.	26,18
111	Swan River Estuary, Perth	AUS	10,000	15/02/1983	.	✓	.	.	8
64	Lake George	AUS	9,000	5/02/2003	.	✓	.	.	74
70	Lake MacLeod	AUS	8,312	28/09/1987	✓	.	.	.	90
47	Penrice	AUS	8,000	7/01/2002	.	✓	.	.	11
45	Gippsland Lakes	AUS	8,000	1/01/1995	✓	✓	✓	.	17,49
8	Barrow Island	AUS	7,611	4/10/2003	✓	✓	✓	.	14,14
162	Jiazhouwan	CHI	7,570	4/05/2004	.	.	✓	.	16
27	Ceduna Bays	AUS	6,157	1/02/2000	.	✓	.	.	173
120	Western Port Bay	AUS	5,783	1/01/1989	.	✓	.	.	79
53	Kangaroo Island, South Australia	AUS	5,600	NA	.	✓	.	.	99
99	Port Wakefield - Webb Beach	AUS	5,550	6/02/2000	.	✓	.	.	173
108	Shallow Inlet/Sandy Point	AUS	5,421	12/03/1983	.	✓	.	.	8
369	Mankyung Estuary	SKO	5,023	1/05/1996	✓	.	✓	.	103,18
3	Anderson Inlet	AUS	5,000	1/01/1993	.	✓	.	.	8
361	Dongjin Estuary	SKO	5,000	1/05/1998	.	.	✓	.	180
349	Schastiya Bay	RUS	4,789	1/09/2002	✓	.	.	.	4
2	Albany Harbours	AUS	4,742	1/01/1995	.	✓	.	.	8
89	Ocean Grove to Barwon Heads	AUS	4,630	17/02/1985	.	✓	.	.	8
97	Port Pirie coast	AUS	4,600	25/01/2000	.	✓	.	.	173
23	Cape Bowling Green	AUS	4,598	31/08/1999	✓	.	.	.	11
175	North-west Bo Hai Wan	CHI	4,285	12/04/2000	.	.	✓	.	20
68	Lake Hindmarsh	AUS	4,000	7/06/1981	.	.	.	✓	8
79	Logan Lagoon, Flinders Island	AUS	4,000	26/02/1999	.	✓	.	.	36
351	Terpeniya Bay	RUS	4,000	22/08/2002	✓	.	.	.	84
33	Derwent Estuary - Pittwater	AUS	3,925	1/01/1993	.	✓	.	.	8
60	Lake Cooloolungup	AUS	3,700	21/02/1981	.	✓	.	.	8
189	Xuwei Saltworks	CHI	3,380	1/05/2004	.	.	✓	.	16
341	Lososei Bay	RUS	3,000	25/05/1985	.	.	✓	.	123
154	Dongsha Islands	CHI	2,900	1/09/1997	✓	.	✓	.	162,162
216	Fuuren-ko (Onnetou ohashi)	JAP	2,712	1/05/2000	.	.	✓	.	179

**Table 4.33 (cont.)** Red-necked Stint - sites of international importance

Site Code	Site	Country	Max Count	Date	SM	NB	NM	B	Ref.
393	Manila Bay	PHI	2,567	4/04/1987	.	.	✓	.	120
148	Chongming Dongtan N. N. Reserve	CHI	2,515	2/05/1990	.	.	✓	.	155
213	Fujimae Higata	JAP	2,474	20/08/1989	✓	.	✓	.	54,54
364	Han River	SKO	2,400	1/05/2000	.	.	✓	.	141
161	Huang He National Nature Reserve	CHI	2,036	4/04/1999	.	.	✓	.	181
394	Olango Island	PHI	2,000	5/05/1987	.	.	✓	.	120
375	Seosan	SKO	1,867	1/05/1997	.	.	✓	.	180
270	Shio-kawa Higata	JAP	1,659	19/05/1996	.	.	✓	.	54
366	Kanghwa Island	SKO	1,560	NA	.	.	✓	.	180
238	Komuke-ko	JAP	1,522	1/05/2000	.	.	✓	.	179
263	Osaka, Nankou Yachouen	JAP	1,450	1/05/2001	.	.	✓	.	177
387	Pattani Bay	THA	1,348	1/09/1987	✓	.	.	.	135
379	Yong Jong Island	SKO	1,150	1/05/1997	.	.	✓	.	180
286	Wajiro Higata	JAP	1,050	15/09/2000	✓	.	.	.	179
332	Bolshoe Lake and Bolshaya River Mouth	RUS	1,000	21/05/1993	.	.	✓	.	68
330	Babushkina Bay	RUS	1,000	1/08/1995	✓	.	.	.	46
356	Aphae Island	SKO	931	17/04/1998	.	.	✓	.	116

