green pages, since it has widened its range. Four of the six species listed in the Kazakhstan Red Data Book are also included in the Red Data Book of the former USSR, and Asiatic Dowitcher and Little Whimbrel are included in the Red Data Book of IUCN.

At present, the conservation of rare and endangered waders

in Kazakhstan is possible only on the territory of several state reserves and reservations: Sociable Plover - in the Kurgald-jinsky and Naurzumsky reserves, Ibisbill - in the Alma-Atinsky reserve, White-tailed Plover - in the Turgaisky reserve. It is extremely important to create a wider network of nature reserves, because this provides the most effective action to protect rare waders and their habitats in Kazakhstan.

Ghanaian ringing scheme launched

Phil Ireland and Steve Dodd

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Following earlier discussion and advice from the British Ringing Office, Dr. Yaa Ntiamoa- Baidu of the University of Ghana invited representatives from the British Trust for Ornithology to help set up the Ghanaian Ringing Scheme and to train local personnel in ringing techniques.

Many will be aware of the work done in Ghana to educate the local people about the birds that use their shores. Great efforts have been made to ensure the birds' survival by discouraging the use of snares to trap terns by the Save the Seashore Birds project. This project has been running for five years, and Dr. Yaa Ntiamoa-Baidu, instigator of the Save the Seashore Birds project and senior lecturer at the University of Ghana, feels that more needs to be learned about the other birds, and particularly the waders, which use these areas.

Following discussions with the BTO, it was felt that it would be more appropriate to set up an independent Ghanaian Ringing Scheme, rather than use British rings, and the first rings to bear the inscription GRS ZOOLOGY LEGON GHANA have now been manufactured by Lambournes, makers of the BTO's rings. The Ghanaians asked for the assistance of British wader ringers to inaugurate their ringing scheme, and hence our visit.

Planning a visit to Ghana during the peak autumn passage in

the second half of September left little time to arrange funding, so we were very grateful when the British Airways' Assisting Nature Conservation scheme stepped in with the generous offer of flight sponsorship to Accra, the capital of Ghana. The next 10 days of innoculations, telexing Ghana and obtaining visas were hectic, with British Airways again coming to the rescue as messenger when the University of Ghana telephone lines were out of order. Even so, it was not until the morning of the flight that Phil Ireland collected the visas from the Ghanaian High Commission in London: the British postal system, bureaucracy and complex forms between them conspired to leave Phil just 20 minutes between arriving at Gatwick and his 'plane's departure.

Accra was the venue for our first two days in Ghana, where plans were discussed and equipment checked, with opportunities too for visiting wader and birdwatching sights. Photographing waves below the cliffs by the Game and Wildlife Service rest house nearly brought a premature end to our visit. A distant building was a prohibited subject, resulting in our arrest by some of the locals. Accompanied by half the local population, we were marched off to the local army officer, who eventually allowed us to retain the film which had been removed from our camera.

All we knew of the catching sites before our visit was that



they were coastal. We knew there were lagoons which held large numbers of Avocets *Recurvirostra avosetta* other waders and terns. Esiama, the first site we were taken to, was 250 km west of Accra and turned out to be 13 km of sandy shore bounded by an estuary at each end, backed by a string of palms. All along were fishing villages, with lines of nets constantly being pulled in. The most common wader was Sanderling, with good numbers of Ringed Plover *Calidris hiaticula* and Common Sandpiper *Tringa hypoleucos*.

The newly fledged Ghanaian Ringing Scheme had purchased a number of mist nets and we had brought clap netting material with us, so the problem now was to catch some of the birds. The next day and a half was spent in unsuccessful attempts to catch, partly due to our improvised mechanisms for the clap net but also due to the occasional huge wave which would wash far higher up the beach than the rest, causing the Sanderling to take off or the net to be flooded out.

Careful diplomacy was called for with dealings with the village children, who had been watching, since the *Save the Seashore Birds* project had been educating them not to catch birds. However, they did come to our rescue by asking why we didn't catch birds the way they used to catch them. Their technique involved the use of snares using maggots as bait.

The snares were promptly confiscated by Yaa, declaring them illegal, but we did adapt their method by using maggots as a means of enticing the birds away from the waves and into the catching area. To the delight of all, it worked! And so the first bird ringed by the Ghanaian Ringing Scheme was a Sanderling B00001. Our glee was short lived, since we caught only one more bird that day, a Common Sandpiper, but a further 24 were caught the next.

Unlike in Britain, the behaviour of waders in Ghana is determined by the state of the daylight, rather than the state of the tide. The birds' normal routine was to feed in the early morning, rest at mid-day, feed again until dusk and then go to roost overnight. Locals told us they had seen waders roosting under the palms, but our attempts to waylay them with mistness did not succeed.

We tried a new tactic on our final night in Esiama, setting mist-nets over a sandy spit at the mouth of the River Amansure at nightfall. This proved highly successful, catching 50 birds of various species, including Sanderling, Common Sandpiper, six Whimbrel *Numenius phaeopus* and small numbers of Knot *Calidris canutus*, Turnstone *Arenaria interpres* and Grey Plover *Pluvialis squatarola*. The first nonwader, a Common Tern *Sterna hirundo*, was also caught and

ringed. The evening provided many lessons for the Ghanaians, not least about the need to be well organised to deal with a sudden influx of birds. It proved instructive for the Europeans as well, teaching us that however far from a settlement, people will materialise. In the middle of dealing with the birds we suddenly became aware of people running about, and we were in the thick of a dispute over the right to fish on the estuary where our nets had been set.

For the second part of our stay, we moved to a huge area of shallow coastal lagoons three hours drive east of Accra. This area was obviously very productive, with large numbers of waders and terns, and also a great deal of human fishing activity. There were not places for clap-netting so our efforts were directed towards mist netting. The intention was to mistnet at dawn and dusk with nets in the shallow water, with the aim of cathing waders and particularly the Avocets. In practice, the first night was very productive for Black *Chlidonias niger*, Little *Sterna albifrons* and Common Terns, 35 in total, with success declining rapidly, with few waders being caught.

Several factors contributed to this lack of success, including the drying of the water in the lagoons, strong winds and the waxing, bright moon. To minimise these effects, some nets were set amongst mangroves, and these resulted in greater success in catching waders. Some interesting birds were caught in this way, including two Kittlitz's Plovers *Charadrius pecuarius* and a Little Bittern *Ixobrychus minutus*, the latter being the only species other than waders and terns which was caught during the visit.

Although the intention is to try to find out more about all wader species passing through Ghana, four species have been singled out for special attention. These are Avocet, Spotted Redshank *Tringa erythropus*, Curlew Sandpiper *Calidris ferruginea* and Sanderling. All are being colour ringed so that subsequent reports do not depend on the bird being recaught. Avocets are to have part of their plumage dyed yellow.

Whilst our visit was successful in catching Sanderling (44 ringed) only six Curlew Sandpiper were ringed and neither of the other two study species were handled. Our two main aims were achieved, namely to initiate the Ringing Scheme and provide some practical advice on techniques in relation to waders. We had not intended to catch and ring large numbers of birds. As we left, the team made up of Yaa, three fieldworkers and their driver were about to embark on further fieldwork to consolidate what we had been able to teach them during our stay.

