



MOROCCO

Extrait de Castell, P. 2021. *Birds' nests - An obsession. A Nester's Story*. 356 pp (Chapter 12, pp. 193-207), complété de données publiées et inédites de Peter Castell

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Nous présentons ici un extrait du livre de Peter Castell (2021. *Birds' nests - An obsession. A Nester's Story*. 356 pp) sur ses voyages à la recherche de nids à travers le paléarctique. Ce livre récent, peu diffusé, contient un chapitre sur ses investigations au Maroc (Chapitre 12, pp. 193-207). Nous avons complété ces extraits par des notes et commentaires en fin d'article, que Peter Castell nous a communiqués – un grand merci à lui d'avoir su partager ses observations marocaines.

In the late 1970s and the 1980s, my family and I enjoyed several holidays/nesting trips at a campsite, near Tarifa, on the southern tip of Spain. From the beach bar, we could see twinkling lights on the Moroccan coast. At the time, I was using a superb book by Dr Colin Harrison, *A Field Guide to the Nests, Eggs and Nestlings of British and European Birds, with North Africa and the Middle East*, published in 1975. Almost all eggs had been described, but nestlings, especially passerines, were poorly documented. Trips to Turkey in 1992 and 1993 had filled some of the gaps, but larks and wheatears needed a major overhaul, and Morocco offered the best opportunity.

The first big trip was in 1994. Jeff Coburn and I caught the overnight ferry from Plymouth to Santander on 20th April and drove down, through Spain, in my Land Rover Discovery. We spent a few days nesting in Extremadura, and then caught the car ferry across the Strait of Gibraltar, from Tarifa to Tangier, on 25th April. On the journey south, we stopped briefly to look at a small colony of Little Swifts nesting under a shop veranda in Larache, and then drove further south to the coastal village of Mehdyia, near Kenitra. A road causeway crosses the north end of the Lac de Sidi Bou-Rhaba, less than 1km from the village. From the causeway, we could see about ten pairs of Crested (Red-knobbed) Coots, two of them with chicks about two weeks old. Five adults were fighting on the water and another was dragging weeds to a half-built nest in a fringe of reeds. It didn't take long to find a nest in the reeds, the eggs identical to those of Coot. While I was photographing a nest with eggs and a newly hatched chick, an adult scuttled across the water towards me, uttering a strange coughing sound, presumably an alarm call. Two Marbled Teal - a pair - were further out on the lake. At dusk, a Marsh Owl flew around the reeds on both sides of the causeway. We booked into a hotel in Mehdyia and found ourselves in the midst of belly dancers. We both drank to excess and, the next day, it was no surprise that we failed to find the Marsh Owl's nest.

We drove south, past Rabat and Casablanca, and reached Marrakech, where we spent a more peaceful night in a posh hotel. The next morning, we drove to the ski resort village of Oukaimeden, at 2650m above sea level, high in the Atlas Mountains. On the journey, we stopped in a village orchard, where a Cetti's Warbler's nest with four eggs was 3m up in

dense brambles rowing over a stream. Nearer to the ski resort, many new birds included Tristram's Warbler, Western Olivaceous Warbler and Levaillant's Woodpecker. Three Alpine Choughs were carrying nesting material, but only Red-billed Choughs were flying into the nesting crevices on a sheer cliff.

The next day, we left our hotel in Marrakech and drove over the Atlas Mountains through the Tizi n' Test Pass, at 2100m, and down to Taroudant. It was a spectacular journey of hairpin bends, barren and stark in parts, with remote Berber villages clinging to hillsides. In the five-hour journey; we saw only Black Wheatear, House Bunting and Moussiers Redstart. By contrast, the walled city of Taroudant was bubbling with birdlife. Thousands of Pallid Swifts were screaming around the town walls and Turtle Doves were abundant in the nearby orange groves.

We spent the next couple of days in the argan woodlands, in the Sous Valley, and made a brief visit to Oued Massa, 65km south of Agadir. We found a few nests, but nothing new. Brian, Bernard and Steve arrived at Agadir airport on 30th April. We drove east to Taroudant and then walked into a gorge, close to the small town of Aoulouz, where I caught a recently fledged chick of Moussier's Redstart. Further east, we stayed that night at a roadside hotel on the outskirts of Ouarzazarte. During our evening meal, I leaned back on my chair and spoke to a lady on the next table. It was Jennifer Saunders, of *Absolutely Fabulous* fame. She was with a crew and they had been filming in the nearby desert.

Our next stop was at Boumalne du Dades. We spent several long days in the desert near this town, in a vast area known as the Tagdilt Track. This was our most important site. We found nests of five species of lark (Temminck's, Hoopoe, Desert, Bar-tailed, Thick-billed) and nests of Desert and Red-rumped Wheatears and Stone Curlew, and watched back a Cream-coloured Courser to a nest with two newly hatched chicks. Most days we enjoyed good success, but one day five of us spent all day in the field and failed to find a single nest.

We saw small flocks of Crowned and Black-bellied Sandgrouse, but neither species seemed to be nesting. Perhaps June, or even July, would be a better time for these.

Close to the town, the track passed through a rubbish tip with vicious, feral dogs. The desert was littered with tin cans, a favourite nest site for the Desert Wheatears. Their nests were also in recesses in the walls of a ruined building, in rodent burrows, in piles of rocks and even in piles of litter. One was beneath a discarded plastic bucket. Surprisingly, the commonest nest site was at the base of low bushes - a situation not previously documented for this species. The Red-rumped Wheatears were all nesting deep in rodent burrows, out of the reach of even the longest arms.

Temminck's was the commonest of the lark species, their nests at the base of low bushes, built up at the outer edge with a rampart of small pieces of earth. Nests of Desert, Bar-tailed and Thick-billed Larks were all very similar, but our only nest of Hoopoe Lark was on top of a low bush.

During our stay at Boumalne, we stayed at a basic hotel near the edge of town. It was run by a man who played the bongo drums every evening. He played with passion, his eyes wide open and rolling. Unsurprisingly, we called him Bongo Man. He was very helpful and twice joined us in our searches in the desert. It was a cheap hotel, and good value, but one day Brian lost a T-shirt, and 5cm of whisky in my bedside bottle vanished in mysterious circumstances. A small price to pay.

Our next base was at Erfoud, north of the huge, famous sand dune known as Erg Chebbi. As we approached the town, a violent sandstorm started and, with visibility nil, we were grounded for the rest of the day. The next day, we followed well-used tracks south to the

dune. There were a few buildings, including a couple of basic cafés. A White-crowned Black Wheatear flew into an inaccessible nest in the roof of one building and a Desert Sparrow was collecting nesting material on the flat roof of another. After much driving, thankfully in a 4x4 car, we found a nest and five eggs of Desert Sparrow, at just under 2m up in a stunted acacia. The nest was domed, with a long entrance spout, and well-protected by the thorny branches. The eggs were identical with those of Tree Sparrow.

We crossed the Atlas Mountains on a road from Ouarzazate to Marrakech and spent an evening in the famous Jemaa el-Fnaa Square. It was a fascinating and colourful experience, but we were hassled by youths, who attempted to pick Brian's pockets.

The next day we drove up to the ski resort at Oukaimeden. A Black Redstart was feeding young in a nest in the roof of a small building, and Rock Sparrows were nesting nearby, mostly in buildings but one in a lamp-post. Two nests of Horned Lark, on the mountainside above the ski resort, held three eggs and three small young.

We stayed at a hotel close to Agadir airport on my last night with the crew. A deserted House Bunting's nest with four eggs was in a corner of the hotel grounds. The crew flew home on 13th May and Lynda arrived the next day.

At Taroudant, Lynda and I booked into the Hotel Palais Salam, a former palace that was built as an integral part of the city wall. It was a cool oasis of luxury and serenity – a perfect escape from the heat, dust and bustle outside. Our room was immaculate, the ensuite bathroom larger than a typical UK bedroom. The staff wore traditional Moroccan clothes, some in splendid, red outfits, complete with tassels. In the cool of evening, dinner was served *al fresco* in the enclosed, tropical garden of exotic plants and banana and palm trees. Recent reviews of this hotel are appalling, but at the time of our visit it was magnificent.

During our stay in Taroudant, we found two strange nests. One was a Corn Bunting with three eggs, the other a Rufous Scrub-robin with a single newly hatched chick. Both were 5m up in olive trees - unusually high for both species and remarkably so for Corn Bunting. Seven nests of Turtle Dove, in about twenty minutes, in an orange grove, was clear proof of the abundance of this species.

There were many nests to be monitored at the Tagdilt Track. As I photographed her newly hatched chicks, the Hoopoe Lark fluttered around my head, alarm-calling - strange, antagonistic behaviour for a lark. With the benefit of so many nests, some found over two weeks previously, it was possible to follow many from egg-laying through to fledging. It was therefore possible to determine incubation and fledging periods for many species, and to make the first descriptions of several nestlings.

This was Lynda's first nesting trip. We had known each other for only six months. She had packed dresses and high-heeled shoes, not really understanding the obsession of nesting. At the end of one of our days on the Tagdilt Track, she complained that we had spent nine and a half hours - non-stop, all day - in the desert. In a fit of conscience, I promised that we would get engaged if we could find a nest and eggs of a Cream-coloured Courser. The next day, a courser suddenly appeared in front of our car and ran off crouching low. I expected chicks, because we had seen several walking with the adults. But instead, the courser returned quickly once we had backed off and it sat down next to the track. The two eggs were the size of camel's droppings. Subsequently, we were able to drive within 5m of the incubating bird. It was the nest of the trip, and it sealed our marital status for the rest of our lives. No regrets.

We also returned to Erfoud. On the journey, I found a nest and four eggs of a Hoopoe Lark in a line of roadside bushes. This was in an extremely remote area of desert, with no sign of any human activity. As I took the photos, a solitary man appeared in the desert at a distance of at least 2km. He came running towards us, waving his arms to catch our attention. We waited, wondering if there was a problem, and also out of courtesy. When he reached us, we quickly understood his sign language. There was no crisis. He wanted a cigarette.

The Desert Sparrow close to Erg Chebbi now contained chicks, about ten days old, and I removed one of them for a photo. It resembled House Sparrow, but the opening feathers were white instead of brown. Another nest, further along the dune in a small acacia, was new but empty, with both male and female sparrows in attendance. We also found another unreachable nest of White-crowned Black Wheatear in the roof of a building.

A man in a shop in Erfoud invited us home to meet his family. In today's modern era of terrorism, we might be cautious, but in 1994 we were gung-ho and naïve. He lived on the outskirts of town in a large flat-roofed house that appeared to be made of dried mud and straw. Three generations were living there. He introduced us to his mother, his wife, his brother and his wife, and several small children. They showed us a transistor radio – the focal point of the main room. One room was occupied by a donkey, and a sheep and several chickens were on the roof. The two wives, probably in their late teens, put on their colourful blue and green sequined wedding dresses, and one of them gave Lynda an embroidered handkerchief. We sat on the floor and drank mint tea, poured from a great height, and then a tasty mutton tagine was put in front of us. We had nothing with us to repay this warm hospitality, but after our meal eleven members of the family piled into our Discovery and I drove them about 60km to the Blue Spring of Meski, where water flows out of a cave to form a pool for swimming. Their gratitude was humbling.

At the Tadgilt Track, I had been waiting patiently for the eggs of a Thick-billed Lark to hatch. Sadly, we had to leave this nest on 26th May and, despite considerable effort in subsequent years, I didn't see chicks of this species until 2014 (see later in this chapter).

We drove north to Tangier, via Midelt and Meknes, and caught a ferry back to Spain. In almost five weeks, we had found the nests of only forty-four species, but there was so much new information.

Avril 1999

Jeff, Bernard, Terry Park and I revisited several of our sites over three weeks in April 1999. We had immediate success near Erg Chebbi, with four nests of Desert Sparrow - three of them in holes in the walls of buildings and one in a small acacia. At the edge of a shallow wadi with scattered and dusty low bushes, two African Desert Warblers flew straight to within 3m of our car, one chattering in alarm, as we played a tape of a male's song. We stopped the tape, the alarm-calling stopped immediately and both birds flew into two adjacent bushes about 100m from our car. We walked over and Jeff found the deep nest, and two eggs, 1m from the ground. During our short stay in this area, we found another two nests of this warbler, one with three eggs, the other empty.

On the same trip, other important nests included Tristram's Warblers, south of Midelt, Barbary Falcon, near Tamri, and Red-necked Nightjar, on shingle near Taroudant. A Lanner Falcon was plucking prey close to the nest on a high cliff in the gorge near Aoulouz.

Mai 1999

There was much unfinished business on this trip, so Steve and I returned for eleven days in May that year. We found more nests of Tristram's Warbler and another empty nest of African Desert Warbler, but most of our time was spent on the Atlantic coast, just north of

Agadir. We stayed in a hotel in Aourir, also known as Banana Village, and searched bushy hillsides for Black-crowned Tchagra, but had no luck with a nest. On one of these searches, I tripped over into a patch of cactus-like plants and a white, milky fluid oozed out onto my hands and clothes as my body squashed the fat stems. Without thinking, I wiped the sweat from my face and the fluid got into my eyes, and they were stinging badly for over half an hour. I was incapacitated, temporarily blinded, the nesting abruptly halted.

Close to Banana Village, a wooded area of argan and acacia trees had been used as a rubbish tip. It proved to be the perfect habitat for Moussier's Redstart. Steve and I found about thirty of their nests - mostly empty, only a few occupied. About half were in tree forks, but the rest were in unusual situations. Several were inside empty tin cans, lodged in tree forks. One was partially inside a black plastic bin bag, entangled in prickly branches. Another was inside an old pair of trousers that had been left hanging over a branch.

Avril 2005

LLynda and I revisited southern Morocco for the first two weeks of April 2005. We travelled as far east as Erg Chebbi, but had most success near the town of Guelmim, 200km south of Agadir. We spent a whole day watching a pair of Streaked Scrub Warblers on a flat, sandy area of semi-desert with many bushes and rodent burrows, 5km south of the town. The male sang from several perches, two of these about 400m apart. He sang on and off all day, but mostly he was silent, the pair often together, low down in bushes, or on the ground. At the end of that day, we were hot, dusty and tired, and Lynda had sunburn on her shoulders. Early the next morning, the birds seemed attached to one small area and I flushed a female from a nest with four eggs. It was 1m up in a dense bush, the eggs visible through an entrance hole near the top of the nest. I placed a camel bone onto a nearby bush as a marker and showed it to Lynda after breakfast. We returned to this nest nine days later near the end of our trip but, sadly, it had been abandoned.

While we were staying in Guelmim, the manager of our hotel took us to an oasis village 12km along the road towards Tata. We visited a young Tuareg man, dressed in blue, living in a Berber tent. He had recently crossed the Sahara by camel train, guided by the stars - a journey of forty-seven days and nights - from Timbuktu in Mali. He had brought various trinkets, all for sale, and we bought a small metal tin encrusted with jewels. Even in his tent, he wore a blue scarf, which covered his head and the lower part of his face.

His people were known as The Blue Men of the Sahara. As we drank tea with him, he moved slightly and Lynda caught sight of his underpants. Also blue.

On the same trip, we were chased by thirteen feral dogs on the Tadgilt Track and, near Erg Chebbi, our car was dug out of a sandy track by a woman and her five children. At Taroudant, I offered a small monetary reward to a local man if he could find an accessible nest of Pallid Swift that I could photograph. There were thousands nesting in holes in the city walls. When we met him again a couple of hours later, he was carrying a shoe box, which contained an adult Pallid Swift, a nest and three eggs. He had completely misunderstood my intentions.

Avril 2006

Steve, Bernard and I spent a difficult week, at Guelmim and Taroudant in early April 2006. We struggled to find any interesting nests, but at the end of our trip we watched a female Moussier's Redstart back to a nest with four eggs at the base of a cactus-type bush on a dusty bank.

Mai 2006

Early the next month, Nick, Bernard, Graham Jones and I flew to Casablanca. Big H was turned back at the baggage desk because his passport had expired, but he flew out to meet us a couple of days later, brandishing a new one.

Our main target was Marsh Owl. We started at Lac de Sidi Bou-Rhaba, where a Marbled Teal scuttled into the reeds with a brood of small ducklings. We waded into the reeds on the north side of the road causeway and Nick and Graham flushed an owl, but there was no nest. A few minutes later, Bernard found two young owls, aged about eleven and fourteen days, on a nest that was deeply hidden in the reeds. The nest looked like it had been purpose-made, but owls don't build nests and, more likely, it was the remains of a duck's nest. We spent two days at Merja Zerga, a shallow tidal lagoon of 4500 hectares on the Atlantic coast, 70km north of Kenitra. We stayed in a hotel near to the outlet to the ocean, at the seaside resort and fishing village of Moulay Bou Selham. Several pairs of Marsh Owls were known to breed in the marshes around the lagoon. We searched vast stretches of marsh on the west side and flushed a Marsh Harrier from four eggs.

Later, Bernard and I flushed two Marsh Owls, only 10m apart. One flew some distance, but the other landed on a high tussock and looked back at us from a distance of about 120m. We backed off and watched. The owl flew back, landed on a tussock, flapped across to another nearby tussock and then dropped down to the ground. She flushed from her three eggs when I was only 4m away. The nest also looked purpose-made, builder unknown. We revisited both of these owls' nests near the end of our trip. The eggs had hatched, and the chicks in the other had grown considerably.

This was a wide-ranging trip, with short visits to several areas. In the Ifrane area, we found nests of Levillant's Woodpecker and Atlas Flycatcher, then considered a separate species from Pied Flycatcher. Big H and I were able to photograph a nest and eggs of White-crowned Black Wheatear at Erg Chebbi, but our car was bogged down in sand several times during the day. We heard, and saw, Dupont's Lark near Midelt, but couldn't find a nest.

Most nights, we stayed in good or reasonable hotels, but we had a bad experience on the road from Marrakech to Casablanca. It was late and we were hoping for a good, roadside motel. After much driving, we stopped at a plain-looking building with a hotel sign. It turned out to be the most disgusting hotel that any of us had ever stayed in. Our room had no door, the bedding was filthy, mosquitoes were abundant, there was no running water and the toilet defies description. But we were tired, so we slept for a few hours, fully clothed.

Mars 2007

Tom Quittenden and I spent a week together in Morocco in late March 2007. Tom had nested in Morocco in April 1997. He was renowned for his wild driving and the engine of his first hired car became detached from the chassis and landed on the road as he sped along a bumpy track. In the replacement car, he collided with a donkey cart at night, and fruit and vegetables poured onto his lap through his broken windscreen. In the ensuing chaos, a bystander stole his spare trousers and Tom then spent the next few hours drinking beer with the policeman who attended the scene.

Our most notable finds included an inaccessible nest of Pharaoh Eagle Owl, with the adult incubating, in the Tata area, and an unusual nest of Moussier's Redstart, inside a wicker basket hanging on the courtyard wall of a small hotel near Oued Massa. Best though was a nest and four eggs of Fulvous Babbler, in a wadi with many scattered, bushy acacias, 50km from Tata. Graham Jones and I found another babbler's nest, with two whole eggs and one broken one, in exactly the same acacia, in April 2009, and a nest and eggs of Western Olivaceous Warbler, in a tangled thicket of tamarisks at Oued Massa. Lawrence Baxter,

Avril 2009 – mai 2010

Keith Robson and I found several more of these warblers' nests in May 2010. These two friends managed to buy, and drink, vast quantities of alcohol, surprisingly easily, even in the wilds of this conservative country.

Avril 2011

In April 2011, Richard and Ashley Jackson, and Bernard and I, travelled south in two separate cars from Agadir to the coastal city of Dakhla in Western Sahara - a disputed territory, administered by Morocco. The journey lasted two days and covered a distance of 1200km, with a dozen police check points along the way. We stopped briefly, 169km north of Dakhla, to look at an occupied nest of Pied Crow - a species only recently discovered breeding in Morocco. It was high on a telecommunications tower, with both adult birds at the nest, but it was totally inaccessible.

From Dakhla, we drove inland towards the village of Aoussard. It was desolate countryside with isolated trees and bushes, some partially buried in sand. The wind was wild, with blown sand in low ridges at the edges of the road, and visibility was poor. Skull and crossbone signs along parts of the road signalled uncleared minefields. Desert Sparrows were common, their untidy, domed nests built in the upper branches of small acacias. One contained eggs, a few had chicks, and we saw family parties. A few nests of Brown-necked Ravens, in solitary, roadside trees, were unoccupied.

When we reached Oued Jenea, 200km from Dakhla, the wind had subsided and we stretched our legs. I was immediately attracted to an acacia tree with a dense, bushy base, only 50m from the road. As I reached the tree, a Fulvous Babbler flushed from a nest with five feathered chicks. It was one of those lucky moments.

In the next few hours, we saw and heard many Cricket Longtails on territory, including a family party of recently fledged young, and found eight nests. Three were from the previous year, two were new and nearly complete, two had recently contained young, and one, found by Ashley, contained four eggs, the adult incubating. Seven of the nests were in thick tussocks of coarse grass and one was at the base of a thick acacia bush. The nests were oval and vertically domed, with a small entrance hole near the top. The eggs were pale blue with tiny reddish-brown spots. This was the first record of a nest and eggs in the Western Palearctic region.

Richard and Ashley returned home, but Bernard and I visited Kniffiss Lagoon on the long drive north. A local boatman took us out to an island in the lagoon. We were hoping for Kelp Gull but found only a single nest of Yellow-legged Gull. At Guelmim, we found six nests of Trumpeter Finch, three of Bar-tailed Lark and one of Hoopoe Lark. It had rained and there was an abundance of fresh vegetation and small flowers.

Avril-mai 2014

2014 was an important year, first with Big H, his son-in-law John, Steve, Bernard, Pete Burton and John Dries, from 16th April to 3d May, and then with Lynda until 18h May. John Hollinrake and John Hudson joined us for a couple of days in late April.

We started at Rissani, near Erfoud, where we met a Berber man who professed to be familiar with Egyptian Nightjar. He and his son joined us for a major search of the desert, and his son flushed a nightjar from a nest with two eggs. There were scattered bushes near the nest, but the eggs were in the open, with no shade whatsoever. At Zeida, we searched for Dupont's Lark, but found instead a nest and eggs of Thick-billed Lark. It was cold here, the distant mountain tops covered in a dusting of snow. At Guelmim, we found nests and eggs of Cream-coloured Courser and Hoopoe Lark, and, using an endoscope, examined a nest and eggs of Blue-cheeked Bee-eater in the bank of a dry wadi. And, at long last, there was a nest and chicks of Thick-billed Lark.

Jun 2015

Lynda and I spent most of the next fortnight in a tourist hotel at Agadir, where I photographed a nest of Yellow-legged Gull on the flat roof overlooking the swimming pool. John Hollinrake gave me telephone directions to a nest of Black-crowned Tchagra near Oued Massa. It had three eggs and was 3m above ground in a small copse of tamarisks. We met a young man near here who led us into an empty building with a colony of Pallid Swifts nesting behind shuttered windows. Inside the upstairs rooms, he unscrewed wooden panels from the windows to reveal several nests and eggs, the adults present at some. This discovery prompted a return visit in early June 2015. Lynda and I were unable to access the building, but the same young man showed us another nest of the swift, this time with large, feathered chicks.

These trips covered a total of twenty-six weeks, with twenty other fellow nesters. We found nests of almost all the Moroccan species. Only a few remain, such as Crowned Sandgrouse and Double-spurred Francolin.....



Ruined building on the Tagdilt Track



Nest and eggs of Bar-tailed Lark



Nest and eggs of Cream-coloured Courser



Nest and eggs of Hoopoe Lark



Nest and eggs of African Desert Warbler



Lynda at Erg Chebbi, SE Morocco, May 1994



Nest and eggs of Moussier's Redstart



Nest and eggs of White-crowned Black Wheatear



Nest and eggs of Marsh Owl



Chicks of Marsh Owl, aged c. 11 and 14 days



Breeding habitat of Fulvous Babbler near Tata



Nest and eggs of Fulvous Babbler



Chicks of Fulvous Babbler



Nest and eggs of Western Olivaceous Warbler



Nest and eggs of Cricket Longtail



Breeding habitat of Cricket Longtail, Western Sahara



Nest and eggs of Egyptian Nightjar



Breeding habitat of Thick-billed Lark near Midelt



Nest and eggs of Thick-billed Lark



Nest and eggs of Black-crowned Tanager



Nest and eggs of Pallid Swift

Notes complémentaires

Maroc Avril-Mai 1994. Castell inéd. & Castell 1996 (*Cercotrichas galactotes*)

- **Grèbe castagneux, Little Grebe, *Tachybaptus ruficollis*.** 'Lac de Sidi Bou-Rhaba : nest with 5 eggs in reeds on 25 April'.
- **Canard colvert, Mallard, *Anas platyrhynchos*.** 'Lac de Sidi Bou-Rhaba : 2 pairs with broods of young on 25 April'.
- **Faucon crécerelle, Common Kestrel, *Falco tinnunculus*.** 'Oued Massa: adult at hole in cliff on 29 April. Taroudant: adult at nest in hole of hotel wall on 17 May'.
- **Foulque à crête, Red-knobbed Coot, *Fulica cristata*.** 'Lac de Sidi Bou-Rhaba: 2 pairs each with about 4 young approx 10 days old, and saw an adult on a nesting platform (nest incomplete) on 25 April. On 26 April, watched adult building a nest in reeds, saw 5 adults fighting, and found a nest with 5 eggs and a newly-hatched chick'.
- **Oedicnème criard, Eurasian Stone-curlew, *Burhinus oedicnemus*.** 'Tagdilt track (Boumalne du Dadès): nest with 2 eggs on 7 May (still 2 eggs on 9, 19, 21, 25 and 26 May)'.
- **Courvite isabelle, Cream-coloured Courser, *Cursorius cursor*.** 'Tagdilt track (Boumalne du Dadès): caught a small chick c 3 days old on 7 May. On 8 May, 2 newly hatched young in nest. On 9 May, saw adult with a small chick and an adult with a chick at least 4 or 5 weeks old. On 20 May, adult with 2 chicks 2-3 weeks old. On 21 May, along one of the many tracks, flushed an adult (from the moving car) from a nest and 2 eggs. Both nests (this and one on 8 May) were in sandy areas with small stones. Drove slowly within c 4 m of incubating adult on 21 May at this nest. Adult still incubating on 24 and 25 May'.
- **Tourterelle des bois, European Turtle Dove, *Streptopelia turtur*.** 'Marrakech: adult sitting on nest in hotel gardens on 27 April. Taroudant: adult sitting on nest on 28 April. Oued Massa: nest with 1 broken egg in bush on 29 April. Taroudant area (18 km east of Taroudant on road toward Ouarzazate): 2 nests in orange orchards, one with 2 eggs and the other with 2 half grown young on 30 April. About 5 km further east, also on 30 April, several (at least 6) nests with 2 eggs and another with 2 large young. On 1 May, 18 km east of Taroudant, a few nests with eggs (c 1/2). Boumalne du Dadès: nest with 2 fully feathered young on 8 May. Taroudant area (c 18 km east of the town): several nests (c 7) with eggs (2) and young (2) on 17 May'.
- **Martinet des maisons, Little Swift, *Apus affinis*.** 'Larache: adults visiting nests about 5m from ground in covered walkway in row of shops (Approx 20 occupied nests) on 25 April. Marrakech: adults flying into 2 nests built on ceiling of window in hotel on 10 May'.
- **Ammomane élégante, Bar-tailed Lark, *Ammomanes cincturus*.** 'Tagdilt track (Boumalne du Dadès): watched pair, one of them was carrying building material on 9 May. Watched adult nest-building on 20 May; nest merely a hollow in the ground with a rampart in the morning, but partly lined by the afternoon. This nest built and lined am on 21 May; still empty on 24 May (now a thick lining of black goat's hair which was not present on 21 May); one egg in this nest on 25 May, and 2 eggs on 26 May'.
- **Ammomane isabelline, Desert Lark, *Ammomanes deserti*.** 'East of Boumalne du Dadès (kms ?): 3 pairs with flying young on 6 May. Tagdilt track (Boumalne du Dadès): nest with 3 eggs on 7 May. c 15 km east of Boumalne du Dadès: nest with 3 feathered young on 8 May. Tagdilt track: nest found with 3 cold eggs am on 7 May, still with 3 (warm) eggs on 20 May, and 2 newly hatched young and an egg on 21 May. Assuming incubation commenced late on 7 May, or early on 8 May, then period approx 13 days. 3 chicks in this nest on 24 and 25 May'.
- **Sirli du désert, Greater Hoopoe-Lark, *Alaemon alaudipes*.** 'Tagdilt track (Boumalne du Dadès): watched male display and female building a nest on top of a low bush nearby on 2 May. This nest contained 1 egg (incomplete clutch) on 7 May, and 2 eggs (complete clutch) and adult incubating on 9 and 20 May. Nest hatched on 21 May (1 egg and 1 newly hatched chick); assuming incubation commenced on 8 May, then period is 13 days. Still only one chick on 24 May (egg must be infertile). Nearby on 9 May, saw a

fledgling. Road Erfoud to Boumalne: an area with low bushes alongside the road in an area of otherwise bare desert – nest on top of bush (c 30 cm) on 24 May – note that nest contains pieces of dried mud on the outer rim’.

- **Alouette de Clot-Bey, Thick-billed Lark, *Ramphocoris clotbey*.** ‘Tagdilt track (Boumalne du Dadès): watched adult with at least 2 fledged young on 4 May. Watched adult to partly constructed nest on 10 May. Watched adult back to a nest with 3 eggs on 19 May - nest in the shelter of a bush and with a pronounced and substantial rampart of flat stones, adult incubating 3 eggs on 24, 25 and 26 May’.
- **Alouette calandrelle, Greater Short-toed Lark, *Calandrella brachydactyla*.** ‘Ouarzazate area (west of town): nest with 3 eggs on 1 May’.
- **Cochevis huppé, Crested Lark, *Galerida cristata*.** ‘Taroudant area (18 km east of the town): nest with 3 eggs on 1 May’.
- **Alouette hausse-col, Horned Lark, *Eremophila alpestris*.** ‘Oukaïmeden: very high (at top, above the Club Alpin area) – 2 nests on 11 May (3 eggs in one, and 3 newly hatched young in the other)’.
- **Alouette bilophe, Temminck's Lark, *Eremophila bilopha*.** ‘Tagdilt track (Boumalne du Dadès): several pairs with flying young and a nest with 2 eggs (adult incubating) on 2 May. In same general area watched adult back to 2 recently fledged young on 3 May and nest with 1 egg and 1 newly hatched young and another nest with 3 eggs on 4 May (3 newly hatched young on 10 May). Same general area, nest with 3 eggs and another with 2 eggs on 7 May (complete clutch of 3 eggs on 8 May, contained 2 chicks (about a day old) and an unhatched egg on 20 May: incubation period, was therefore 11 days, commencing from completion of the clutch. 2 chicks in this nest on 24 May. Tagdilt track: another nest with 3 eggs on 20 May (still 3 eggs on 21 and 24 May). On 25 May, this nest contained 2 eggs and a newly hatched chick and, on 26 May, there were 2 chicks and 1 egg’.
- **Bulbul des jardins, Common Bulbul, *Pycnonotus barbatus*.** ‘Taroudant area (18 km east of Taroudant on road towards Ouarzazate): nest c 4 m from ground with 3 young about half grown on 30 April. About 5 km further east on this road, also on 30 April, a new nest, built but empty, c 2 m from ground in orange tree, and another nest in olive tree c 4 m from ground, which contained c 3 young about half grown’.
- **Agrobate roux, Rufous-tailed Scrub Robin, *Cercotrichas galactotes*.** Le 18 mai, un nid placé à 5 mètres de haut dans un olivier à c 19 km à l’est de Taroudant contenait un seul jeune récemment né (‘Not only was this nest exceptionally high it was also significantly earlier than might be expected from the laying dates quoted in BWP’).
- **Rossignol philomèle, Common Nightingale, *Luscinia megarhynchos*.** ‘Boumalne du Dadès: adult alarmed in undergrowth by river on 21 May’.
- **Rougequeue noir, Black Redstart, *Phoenicurus ochrurus*.** ‘Oukaïmeden (very high, slightly above the Club Alpin area): nest with newly hatched young in underside of roof of small building on 11 May’.
- **Rougequeue de Moussier, Moussier's Redstart, *Phoenicurus moussieri*.** ‘Taroudant area (c 1 km SW of the town): pair feeding at least 3 recently fledged young on 28 April. Aoulouz Gorge: watched pair back to recently fledged young on 1 May. Atlas Mountains: flying young on 10 May. Near Agadir: saw adult with food on 12 May’.
- **Traquet du désert, Desert Wheatear, *Oenanthe deserti*.** ‘Tagdilt track (Boumalne du Dadès): partly constructed nest on ground underneath a partly buried plastic bucket on 7 May, 3 eggs on 19 May. Nest under a stone with 3 young c 8 days old on 8 May. Nest on the ground, partly sheltered by a low bush (in similar site to a lark’s nest) with 4 feathered young c 11 days old, and nearby another similar nest with 3 large feathered young on 9 May. Watched female back to nest with 3 eggs on the ground in shelter of bush (like a lark) on 20 May; still 3 eggs on 21, 24, 25 and 26 May’.
- **Traquet à tête grise, Red-rumped Wheatear, *Oenanthe moesta*.** ‘Tagdilt track (Boumalne du Dadès): adult flew into rodent burrow and remained there (obviously incubating eggs or brooding small young) on 2 May. In same general area, nest in a small tin can (lying on the ground) contained 4 large feathered young and an infertile egg on 4 May. Same general area, adult flew out of hole on 8 May. Watched adults carrying food into hole on 8 May. c 15 km east of Boumalne du Dadès: saw adult with food on 8 May. Near Erfoud: nest with 4 eggs in hole in roadside rocks on 22 May’.

- **Traquet à tête blanche, White-crowned Wheatear, *Oenanthe leucopyga***. 'Near Erfoud: watched adult back to nest hole in an occupied house on 22 May'.
- **Merle noir, Eurasian Blackbird, *Turdus merula***. 'Oukaïmeden area: nest with 1 egg (incomplete clutch) on 27 April; very high on the mountain, just below the restaurant area: nest with 3 eggs on 11 May. Taroudant area (c23 km east of Taroudant on road to Ouarzazate): nest with 3 eggs on 30 April. Boumalne du Dadès: nest with 4 small chicks on 8 May. Marrakech: nest with 3 eggs in bushes in hotel garden on 11 May'.
- **Bouscarle de Cetti, Cetti's Warbler, *Cettia cetti***. 'Road Marrakech to Oukaïmeden in the foothills of the Atlas Mountains: a nest with 4 eggs in dense bramble overhanging a narrow irrigation stream on 27 April; nest was approx 3 m above the ground, exceptionally high'.
- **Cisticole des joncs, Zitting Cisticola, *Cisticola juncidis***. 'Lac de Sidi Bou-Rhaba: watched adults back to recently fledged young on 25 April. Oued Massa: nest with fully feathered young in nest in area of sedges, and another nearby also with large young on 13 May (from memory, one nest contained about 4 young)'.
- **Hypolaïs obscure, Western Olivaceous Warbler, *Hippolaïs opaca***. 'Oukaïmeden (very high on the mountain, just below the Club Alpin area): nest with 1 egg (incomplete clutch) in bush c 1 m from ground on 11 May. Taroudant: watched adult feed fledged chick in gardens of Hotel Palais Salem on 17 May'.
- **Fauvette mélanocéphale, Sardinian Warbler, *Sylvia melanocephala***. 'Oued Massa: 3 recently fledged young still unable to fly properly on 29 April; nest with 3 eggs in a bush on 16 May. Taroudant area (c 23 km east of the town): nest with 3 eggs on 30 April'.
- **Gobemouche gris, Spotted Flycatcher, *Muscicapa striata***. 'Taroudant area (c 19 km east of the town): 2 nests (3 and 2 eggs) on 18 May'.
- **Pie-grièche grise, Great Grey Shrike, *Lanius excubitor***. 'Taroudant area (c 1 km SW of the town): nest with 3 eggs on 28 April. Taroudant area (18 km east of the town): fledged young on 1 May. Merzouga: adult incubating on nest in dense acacia on 22 May. Agadir to Tamri road (just S of Banana Village): nest in bush (with 4 eggs)'.
- **Pie du Maghreb, Maghreb Magpie, *Pica mauritanica***. 'Road Taroudant to Agadir: flushed adult from nest in tree on 29 April'.
- **Chocard à bec jaune, Alpine Chough, *Pyrrhocorax graculus***. 'Oukaïmeden area: 3 adults carrying nesting material on 27 April'.
- **Crave à bec rouge, Red-billed Chough, *Pyrrhocorax pyrrhocorax***. 'Oukaïmeden area: several adults flying into nesting holes in the cliffs on 27 April'.
- **Moineau espagnol, Spanish Sparrow, *Passer hispanolensis***. 'Taroudant: adult feeding chicks in nest on 17 May'.
- **Moineau blanc, Desert Sparrow, *Passer simplex***. 'Merzouga: nest with 5 eggs c 2 m from the ground in a small acacia tree on 5 May; nest domed, the entrance a protruding spout in the side. Built mainly of grass and plant fibres, lined with grass and feathers; an old nest (previous year) in the same bush. Also, on 5 May watched adult carrying nesting material near a café. 22 May: nest with 5 eggs on 5 May now contains chicks about 2 weeks old. Found another new nest, empty, also in an acacia bush, a few miles away'.
- **Moineau soulcie, Rock Sparrow, *Petronia petronia***. 'Oukaïmeden (near Club Alpin area): several pairs breeding in buildings but one pair nesting in a lamp-post on 11 May'.
- **Serin cini, European Serin, *Serinus serinus***. 'Boumalne du Dadès: nest with chicks on 8 May; nest with newly hatched chicks on 21 May'.
- **Verdier d'Europe, European Greenfinch, *Carduelis chloris***. 'Boumalne du Dadès: nest with 4 eggs on 8 May. Taroudant 19 km east of the town: nest with large young (c 4 from memory) on 18 May'.
- **Chardonneret élégant, European Goldfinch, *Carduelis carduelis***. 'Oued Massa: nest with 4 eggs on 13 May'.

- **Bruant du Sahara, House Bunting, *Emberiza sahari***. 'Agadir: nest with 2 eggs in hole of wall in hotel gardens on 29 April; deserted nest with 4 eggs in hole in wall of hotel on 13 May'.
- **Bruant proyer, Corn Bunting, *Emberiza calandra***. 'Boumalne du Dadès: nest with 2 eggs (on the ground) on 8 May. Taroudant area (c 18 km east of Taroudant on road to Ouarzazate): nest with 3 eggs at 5 m in a tree (exceptional) on 17 May'.

Maroc Avril-Mai 1999. Castell inéd. & Castell 2000 (*Phoenicurus moussieri*, *Sylvia deserticola*, *Sylvia deserti*, *Emberiza sahari*)

- **Héron garde-bœufs, Western Cattle Egret, *Bulbulcus ibis***. 'Boumalne du Dadès: colony in pine tree, new nests and birds at the nest on 19 April'.
- **Ibis chauve, Northern Bald Ibis, *Geronticus eremita***. 'Tamri: 32 nests but only 12 large young on nesting cliff on 26 May'.
- **Spatule blanche, Eurasian Spoonbill, *Platalea leucorodia***. 'Oued Massa: birds tightly together on islands in the river in what appeared to be a colony on 25 May'.
- **Aigle de Bonelli, Bonelli's Eagle, *Aquila fasciata***. 'Track from Tata towards Taroudant: pair of adults near fresh nest on a cliff (old nest on same cliff) on 17 April'.
- **Faucon crécerelle, Common Kestrel, *Falco tinnunculus***. 'Taroudant area (village nearby): children threw a stone at a building and an adult flew from a nest in a hole in the wall on 4 May'.
- **Faucon lanier, Lanner Falcon, *Falco biarmicus***. 'Aoulouz Gorge: watched pair flying to and from obvious nesting ledge but could not see the contents, one of the adults plucked a small bird with white feathers on 26 April. On 23 May at this site there was much more excreta on the nesting ledge but adults not present. Presumably the chicks had fledged sometime between these 2 visits'.
- **Faucon de Barbarie, Barbary Falcon, *Falco peregrinus pelegrinoides***. '1-2 km N of Tamri: pair on sea cliffs close to ledge covered in excreta on 27 April'.
- **Courvite isabelle, Cream-coloured Courser, *Cursorius cursor***. 'Tagdilt track: adult brooding chick about 2 days old on 20 April; pair with a half grown chick on 1 May; watched a pair with a fully grown chick on 21 May'.
- **Tourterelle turque, Eurasian Collared Dove, *Streptopelia decaocto***. 'Hotel Gardens (between Agadir and Tamri just N of Banana village): nest in tall palm growing through hotel building, one full grown young in the nest on 25 May'.
- **Tourterelle des bois, European Turtle Dove, *Streptopelia turtur***. 'Between Agadir and Tamri: 2 nests (adult sitting on one, and 2 eggs in other) on 24 May'.
- **Engoulevent à collier roux, Red-necked Nightjar, *Caprimulgus ruficollis***. 'Taroudant Wadi c 1 km SW of the town: shingle and sand. Female brooding 2 young c 3-4 days old in nest on 26 April (this seems exceptionally early). On 4 May these chicks were about 5 m from where they were found (watched one of these chicks run for a few metres)'.
- **Martinet pâle, Pallid Swift, *Apus pallidus***. 'Taroudant: many pairs flying in and out of holes in the walls on 17 April'.
- **Martin-pêcheur d'Europe, Common Kingfisher, *Alcedo atthis***. 'Aoulouz Gorge: adult (carrying a fish) flew into burrow in a bank on 26 April'.
- **Guêpier de Perse, Blue-cheeked Bee-eater, *Merops persicus***. 'Jorf: a few pairs near entrance to nesting burrows on 29 April'.
- **Guêpier d'Europe, European Bee-eater, *Merops apiaster***. 'Taroudant area: saw adult fly into hole on 26 April'.
- **Ammomane élégante, Bar-tailed Lark, *Ammomanes cincturus***. 'Road from Goulimine to Tata: adult incubating 2 eggs in nest at base of low bush on 16 April'.
- **Ammomane isabelline, Desert Lark, *Ammomanes deserti***. 'Tagdilt track: watched a pair back to a nest with 2 newly hatched young on 21 May'.

- **Sirli du désert, Greater Hoopoe-Lark, *Alaemon alaudipes*.** 'Goulimine c 8 km south of the town: new but empty nest on low bush on 15 April. Tagdilt track: several males displaying on 20 April. Merzouga near Auberge Dakoua: one fledged young on 29 April. Tagdilt track: nest containing 2 chicks 3-4 days old on 20 May (nest on low bush)'.
- **Alouette de Clot-Bey, Thick-billed Lark, *Ramphocoris clotbey*.** 'Tagdilt track: saw 5 birds, possibly a family party, on 20 May; new empty nest (at the base of a bush) with a huge rampart of stones on open edge of nest on 21 May'.
- **Alouette bilophe, Temminck's Lark, *Eremophila bilopha*.** 'Tagdilt track: nest with 2 eggs (female incubating), and another female building nest on 19 April (one egg in this nest on 25 April and still one egg, with female incubating, on 28 April). First nest (2 eggs on 19 April) had 2 young, c 2 days old, on 25 April. Female building a nest (male in attendance) on 25 April. Nest with 2 young c 3 days old on 20 May'.
- **Hirondelle rousseline, Red-rumped Swallow, *Hirundo daurica*.** 'Aoulouz Gorge: adult building a nest under a bridge on 26 April'.
- **Bulbul des jardins, Common Bulbul, *Pycnonotus barbatus*.** 'Between Agadir and Tamri: nest with 3 small young c 4 m from ground in tall bush on 24 May'.
- **Agrobate roux, Rufous-tailed Scrub Robin, *Cercotrichas galactotes*.** 'Agadir to Tamri road (near Banana Village): nest on a low tree branch (c 1 m) with 1 egg (incomplete clutch) on 27 May'.
- **Rosignol philomèle, Common Nightingale, *Luscinia megarhynchos*.** 'Aoulouz Gorge, orchard area: new nest (ready for eggs) exceptionally high, c 2 m from the ground in a bush on 26 April'.
- **Rougequeue de Moussier, Moussier's Redstart, *Phoenicurus moussieri*.** 'Oued Massa: watched adult to a flying chick on 14 April. Taroudant area (wadi c 1 km SW of the town): watched a pair back to nest in recess in low soil bank; nest substantial, Robin like, open at front of the bank, with 4 young c 8 days old on 17 April; saw family party here on 26 April. Near Midelt in mountains near main Tristrams Warbler site: watched male fly to a crevice in juniper tree, new nest in the crevice (c 0.5 m from ground) on 24 April. Between Agadir and Tamri (North of Banana village) on 24 May: 2 or 3 chicks in nest in small tin can c 1 m from ground in branches of a bush. Another (open) nest in the fork of a juniper tree c 2 m from ground, containing 2 chicks about 3 days old. Another nest built at the base of a tree branch 1.7 m from ground, with 2 eggs. Several other empty nests, most on tree branches c 2 m, but one built into a pair of trousers hanging over a branch. In same area on 25 May, 2 empty nests built in tin cans 1-1.3 m from ground in the branches of bushes' (Castell inéd.).

'Usual nest sites for this species are on the ground, sheltered by a low bush or tussock. or in a recess in the side of a low bank or tree, and occasionally in low-dense hushes 30-60 cm above ground. In late May 1999, we found c30 nests in open woodland along the coastal road north of Agadir. Approximately half were in tee forks, typically just below 2 m above ground; many were in discarded tin cans, not only on the ground. but also up to 2 m high in bushes. One nest was constructed within a pair of trousers which had been left hanging over a tree branch, c2 m above ground. These nests were at all stages, with eggs, small and large young, and were probably all second broods. In other parts of the country, we found nests in April, and saw many flying broods in late April' (Castell 2000).

- **Traquet oreillard, Western Black-eared Wheatear, *Oenanthe hispanica*.** 'A few miles south of Tamri: an adult alarming on 24 May'.
- **Traquet du désert, Desert Wheatear, *Oenanthe deserti*.** 'Goulimine: on 15 April, an open nest on ledge in old building with 4 newly hatched young, and another nest on ground, under flat stone, with 4 young about 3 days old. Tagdilt track: nest in pile of stones (almost ready for eggs) on 25 April; nest with 4 eggs in open site in hole in wall of old building on 1 May; nest (2 cold eggs) in tin can lying on ground on 2 May (this must be a second clutch because another nest in a tin can c 10 m away contained a nest from which young had recently fledged); nest with 4 eggs in open hole in wall of building and another 2 nests on ground in shelter of a bush (like lark nest) one with 3 small young and the other empty on 20 May; 3 nests, 2 of them in tin cans lying on the ground (4 & 3 eggs) and the other on the ground at the base of a bush (3 eggs) on 21 May (NOTE – like larks, the Desert Wheatear will make a deep scrape in the ground at the base of a bush)'.
- **Traquet à tête grise, Red-rumped Wheatear, *Oenanthe moesta*.** 'Goulimine c 8 km south of the town: nest with chicks 6-7 days old in hole in wall of old building, another nest being built nearby in a roadside

rodent burrow and a pair feeding nestlings in a burrow (on 15 April. Tagdilt track: saw a fledgling on 19 April. Boumalne du Dadès c 10 km east of the town on road towards Erfoud: both of pair feeding young about 11 days old in nest in hole in the ground on 24 April'.

- **Traquet à tête blanche, White-crowned Wheatear, *Oenanthe leucopyga*.** 'Merzouga (Café Yasmina): recently fledged young on 21 April. Merzouga area: saw c 3 fledglings on 22 April'.
- **Traquet rieur, Black Wheatear, *Oenanthe leucura*.** 'Midelt area (near main Tristram's Warbler area): nest with chicks in hole in wall on 19 May'.
- **Merle noir, Eurasian Blackbird *Turdus merula*.** 'Between Agadir and Tamri: nest with fully feathered young on 24 May'.
- **Cisticole des joncs, Zitting Cisticola, *Cisticola juncidis*.** 'Oued Massa: watched adult building a nest on 14 April'.
- **Dromoïque vif-argent, Streaked Scrub Warbler, *Scotocerca inquieta*.** 'Goulimine, 8-10 km south of town: family party of 4 flying young and 2 adults on 15 April'.
- **Fauvette de l'Atlas, Tristram's Warbler, *Sylvia deserticola*.** 'Midelt area – a few kms from the town on the road towards Erfoud (where the road starts to climb into the mountains):
 - Nest 1: nest being built in Sage bush on 23 April; adult incubating 3 eggs on 30 April; empty on 19 May
 - Nest 2: 24.4.99 adult incubating 3 eggs in nest 0.3 m from ground in Sage bush on 24 April; 4 eggs on 30 April; fully feathered young (about 11 days old) on 19 May
 - Nest 3: nest 0.3 m from ground in Sage bush with 1 egg and a broken egg on 24 April
 - Nest 4: adult incubating 3 eggs on 30 April; young 9-10 days old on 19 May
 - Nest 5: nest 0.5 m in Sage bush with 3 eggs on 19 May' (Castell inéd.)

'In April-May 1999, we found five occupied nests of this species in the Atlas Mountains south of Midelt. All were situated low (typically 50cm) in sage bushes, and in the third quarter of April most were under construction or contained incomplete clutches. We established that incubation, which takes 13 days, commences with the next-to-last egg laid in the clutch. The role of the sexes in incubation appears to be unknown. but we saw only females incubating. Nestlings are altricial and naked at hatching. Skin is dark pink, darker on head and back. The mouth is orange-yellow. There are two distinct and elongated black markings, one at either side of the base of the tongue, with a faint dark narrow line from the tip of each, continuing along the edge of the tongue and converging near the tip. These are joined near the base by a faint dark marking which tapers to a point halfway down the centre of the tongue. Gape flanges are pale yellow. Both adults were feeding the resultant young in late May' (Castell 2000)

- **Fauvette mélanocéphale, Sardinian Warbler, *Sylvia melanocephala*.** 'Taroudant area c 1 km SW of the town : nest with 3 eggs c 1.7 m from the ground in a bush on 17 April'.
- **Fauvette du désert, African Desert Warbler, *Sylvia deserti*.**
 - Nest 1 - Merzouga area just south of the Auberge Derkoua: female on nest containing 2 eggs on 21 April; nest c 1 m from ground in thick bush in area of bushes in sandy desert. Female incubating and, when flushed from the nest, remained within the bush (still 2 eggs) on 29 April. Still 2 eggs on 1 and 3 May.
 - Nest 2 - Merzouga c 1 km N of Auberge Derkoua, bushy area in sandy valley: new nest (ready for eggs) c 0.6 m from ground in thick bush on 22 April. This nest still empty on 29 April
 - Nest 3 - Merzouga area c 1 km S of Auberge Derkoua: nest in bush c 0.6 m from ground with 3 cold eggs on 22 April. Still 3 cold eggs on 23 April. Female incubating 3 eggs on 29 April, 1 May and 3 May. This nest was checked by the owner of Auberge Derkoua on 4 May when it contained 3 newly hatched young. Incubation period is 12 days, commencing on completion of the clutch.
 - Nest 4 - Merzouga area 3-5 km N of Auberge Derkoua: new nest of the year (probably used this year but now empty) on 20 May' (Castell inéd.).

'In April 1999 we found four nests of this species near Merzouga. The area was mainly flat open desert, with slightly lower areas and wadis with scattered thick bushes. Sitting in the car at the edge of one of these bushy areas, we played a recording of the song of Desert Warbler. One (the male, we suggest, from behaviour) immediately appeared, alarm called, and perched in a bush c 3 m from the car, and a second (the presumed female) appeared within a further 30 secs. As soon as the tape was stopped, both flew to two adjacent bushes, within c 100 m of the car. On searching these bushes, the male flew from

one and the female was discovered incubating two eggs in a nest in the other. All four nests were c1 m above ground and well concealed in thick thorn bushes c 2 m tall. We established that incubation commences when the final egg has been laid and occupies 12 days. Clutch size is 2-3 eggs. Nestlings are altricial and naked at hatching, with flesh-pink skin. The mouth is orange-yellow with two dark elongated markings, one on either side of the tongue. Gape flanges are pale yellow' (Castell 2000)

- **Cratélope fauve, Fulvous Babbler, *Turdoides fulvus***. 'Goulimine c 8 km south of the town: 7 adults near a new nest in a thick bush c 2 m from ground on 14 April. Nest smaller than that of Arabian Babbler, and compact, of sticks, grass stems, with a thick lining of tufts of goat's hair'.
- **Etourneau unicolore, Spotless Starling, *Sturnus unicolor***. 'Taroudant area (village nearby): children had caught a recently fledged young bird on 4 May'.
- **Moineau blanc, Desert Sparrow, *Passer simplex***. 'Merzouga (Café Yasmina): pair feeding chicks in a nest in hole in wall of building on 21 April (both adults bringing food)'. Merzouga: 3 nests in holes in walls of buildings and one nest in a bush 2 m from ground (domed nest with entrance spout) on 29 April; in this nest in the bush all 5 young were newly hatched (and approximately the same size, so incubation must have commenced from the last egg)'.
- **Bruant zizi, Cirl Bunting, *Emberiza cirlus***. 'Between Agadir and Tamri: nest with half grown chicks and an infertile egg on 24 May'.
- **Bruant du Sahara, House Bunting, *Emberiza sahari***. Tata: watched female building (with male in attendance) a nest in a hole in a wall and another nest nearby (with incomplete clutch of 3 eggs) in wall of house on 17 April. Talouine, In ruins next to hotel: 2 nests (3 and 2 eggs) in crevices in the walls on 26 April; on 28 April both of these nests contained full clutches of 3 eggs (same on 4 May). East of Boumalne du Dadès on Erfoud road: nest with 3 eggs on a ledge in open building on 29 April; still 3 eggs on 1 May and 3 recently hatched young on 3 May' (Castell inéd.).

'Nestlings are altricial and downy, with long and dense whitish-grey down on the head and upperparts. Mouth and tongue are deep pink, the latter with prominent pale pink rear spurs, and pale yellow edges and tip. Gape flanges are whitish yellow' (Castell 2000)

Avril 2011, Sahara Atlantique (1 - 6 avril). Castell inéd. & Castell et al. (2011) (*Spiloptila clamans*).

- **Courvite isabelle, Cream-coloured Courser, *Cursorius cursor***. 'On 2 April a roadside pair crossed the road with two young birds at least four weeks old (eggs would have been laid in mid-February)'.
- **Pie-grièche grise, Great Grey Shrike, *Lanius excubitor***. 'On 2 April, two nests contained feathered young, and recently fledged young were close to a vacated nest on 4 April'.
- **Corbeau pie, Pied Crow, *Corvus albus***. 'Nest on mast at 169km N of Dakhla and pair nearby on 2 April. On 6 April, saw both of pair fly up to nest, and one adult went to nest and sat on it'.
- **Prinia à front écaillé, Cricket Warbler, *Spiloptila clamans***. Les nids découverts à l'Oued Jenna les 2 et 4 avril ont été détaillés dans Castell et al. (2011). Nests found at Oued Jenna on April 2 and 4 were detailed in Castell et al. (2011).
- **Cratélope fauve, Fulvous Babbler, *Turdoides fulvus***. 'Nest with 5 young about 12 days old on 2 April in Oued Jenna. The nest was 1m from the ground in the thick bushy base of a mature Acacia, c 100m from the road in an area of many scattered Acacias. The nest was built mainly of grasses and lined with animal fur (probably Camel). On 4 April three young birds were still in the nest and two were c 1m away. One of the fledged young was photographed. About one hour later the pair of adults (with no other adults) were seen leading all 5 of the young birds along the ground, regrouping in the shade at the base of each Acacia they approached. The nestling period of Fulvous Babbler has not been recorded but it is likely to be similar to Arabian Babbler i.e. c 14 days. Incubation period is also unrecorded, but is likely to be c 13-14 days, commencing with the final egg. Based on these estimated periods, the first egg is likely to have been laid c 3 March.
- **Moineau blanc, Desert Sparrow, *Passer simplex*** 'On 2 April along the road from Dakhla to Aousserd ---- 3 high (3-4m) unexamined nests, one of which was built in the base of a nest of Brown-necked Raven ---- all in isolated Acacias. These nests presumably contained eggs or fairly small young because, in each

case, an adult flew from the nest. At different locations along the same road a group of c 20 adults was seen (old nest nearby), a low nest (c 1m) contained 4 eggs in a small Acacia, and an adult was seen carrying nesting material, and a family party (recently fledged young) was seen. There were also many old or unoccupied along the road, all in Acacias, and all domed nests of grass, and with long entrance spouts. The nest examined (with four eggs) was lined with fine grass, feathers and a piece of blue string'.

Avril 2011, Bas Draa côtier, 20-40 km au sud de Goulimine (8 - 12 avril). (Castell inéd.)

- **Courvite isabelle, Cream-coloured Courser, *Cursorius cursor*.** 'A young bird 3-4 weeks old on 8 April'.
- **Sirli du désert, Greater Hoopoe-Lark, *Alaemon alaudipes*.** 'A nest with a full clutch of two eggs (adult incubating) atop a low solitary bush on 9 April. This nest was revisited on 12 April, when it still contained two eggs'.
- **Ammomane élégante, Bar-tailed Lark, *Ammomanes cincturus*.** 'Three nests, all with complete clutches of two eggs (adults incubating) on 8/9 April, all at the base of low flowering shrubs. A nest under construction (both adults carrying nesting material) on 11 April'.
- **Alouette bilophe, Temminck's Lark, *Eremophila bilopha*.** 'A nest under construction at the base of a low shrub on 11 April'.
- **Traquet du désert, Desert Wheatear, *Oenanthe deserti*.** 'A nest (with two newly hatched young and an egg) on the ground at the base of a bush on 8 April. This is a common, but apparently rarely recorded, nest site in Morocco (I have a great many records of such sites, especially from the Tagdilt track, mainly in 1994 and 1999)'.
- **Traquet à tête blanche, White-crowned Wheatear, *Oenanthe leucopyga*.** 'In the same group of buildings as below --- a nest with 3 newly hatched young and an egg on 8 April. First egg would have been laid c 22 March. Nest in a recess in the outside wall of one of the buildings'.
- **Roselin githagine, Trumpeter Finch, *Bucanetes githagineus*.** 'An unusually large nesting group of at least seven pairs in a group of three old buildings. On 8 April there were seven nests which contained C/5 (adult incubating); C/5 (adult incubating); 5 newly hatched young (adult brooding); 4 young c 6-7 days; 5 young c 10-11 days; adult incubating or brooding small young (nest not examined); adult incubating or brooding small young (nest not examined). The nests were in typical situations in recesses in the walls of the buildings. Nesting was clearly not highly synchronised (minimum of 12 days between the earliest and the latest). A nest C/6 (adult incubating) at the base of a bush in open desert on 11 April'.

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