Bird Lore in Southwestern Iran

By

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"The birds watch it all; they and the angels," a village woman bemused to me, reflecting upon the radical changes now taking place in rural Khuzestan, the southwestern province of Iran, ancient Persia. "Like angels, the birds travel and see far beyond our horizons; they know." Indeed, the Koran itself records the prescience of birds: "Solomon marshalled his forces of jinn and men and birds. He inspected his birds and said, 'Where is the hoopoe? I cannot see him here!' . . . The bird, who was not long in coming, said, 'I have just seen what you know nothing of. With truthful news I come to you from Sheba.' " (Koran, Surah 27.)

It is with truthful news that the birds of northern Khuzestan tell us of the history and the transformation of the land. Nesting here and there in the villagers' lives and lore, patterned into the landscape and seasons, the birds will partake of the changes now being wrought in the ancient uplands of Mesopotamia no less than the villagers will themselves. How long will their songs be heard in the winds now blowing through the land?

When one listens closely to the traditional villagers of northern Khuzestan, their lives scarcely altered from that of neolithic man who sowed the first seeds of agriculture here upon the Mesopotamian plain, one is surprised at how vital and varied, how subtle are the ways in which men and birds have shared these fields and mud settlements for millenia—and one wonders what new associations they will form with one another.

Indeed, the primacy of relationships between birds and men in Iran is ancient. In the seventh avatar the mythical god Verethraghna is incarnated into a bird, Vateghna,

Forth he flies with ruffling feathers
When the dawn begins to glimmer . . .
Skimming o'er the valleyed ridges,
Skimming o'er the lofty hill-tops,
Skimming o'er deep vales of rivers,
Skimming o'er the forests' summits,
Hearing what the birds may utter." (Carnoy 272)

As a golden-collared vulture he can perceive a piece of flesh from as far away as the ninth district, and from thence control the lives of men, breaking battle-hosts asunder, shaking battle-hosts with terror, tearing out the eyeballs and deafening the ears of men who are false to Mithra. (Carnoy 273). The birds not only watch it all, but they vitally determine the outcome in the dealings of men upon the hoary plains of Persia!

The province of Khuzestan where I conducted several years of anthropological studies recently, in southwestern Iran, is not a land of peacocks and nightingales, which adorn the royal throne and celebrated poetry of Persia. Rather, this is the land of migratory birds en route across Asia, the land of field crows and night owls, kingfishers and hawks. It was from here, his palace at Susa nearby, that the vigorous young Cyrus set out to create his great empire of the western world. extending from India to Egypt and Macedonia, (559–530 BC.) Khuzestan has since been the theater for campaigning armies and missionaries, engineers reconstructing the landscape, foreign envoys and traders' caravans; the unwritten history of its villages, found in custom and folklore, reflects the pragmatism and the eclectic humor of this ancient, criss-crossed countryside. In peacetime, breadbasket for empires; in their decline, alms dish for threatened peasantries. "At any rate, pigeon feathers make the softest pillows . . . And there are always pigeons around."

Geologically Khuzestan is an extension of the Mesopotamian plain that tilts eastward from the Tigris and Euphrates basin towards the Zagros mountains: on this plain rose the urban civilizations of Ur, Babylon, Susa and Baghdad, the last the cultural fountain of Arabic Islam; while these mountains, in contrast, have provided a pathway for invading tribesmen, a stronghold for dissident nomads. Thus, in the region where these socio-geographical elements meet, in the fertile upland of northern Khuzestan, the mixture of peoples and cultures as ancient as man himself and as transitory as his many migratory waves is no less rich and multiple as are the species of wildfowl. Arabs, Lurs and Bakhtiaris intermingle with Persian-speaking peasant farmers, the "mahalli's,"—all modern Iranians today, as the countryside once again promises the unrivalled prosperity of an extensive development program, the Dez Irrigation Scheme, a showcase of modern agriculture in the

Middle East. In short, the presente ecosystem of northern Khuzestan in which birds and men share the same land, water, and their resources as they have for millennia, faces total reconstruction, perhaps hardly less radical than the neolithic revolution itself, which first took place on these very Mesopotamian uplands thousands of years ago. "The birds watch it all; they and the angels."

In Rahmat-Abad village where I lived for over a year, people talk about birds, men, and changes in the times that both have seen here. Speaking of the years before Reza Shah the Great (1925–1941) brought order to this countryside, a turbaned Arab originally of the plains to the south told me, "In our raids we were like falcons, perched on the fist of our sheikh. Sharp eye and sharp beak, but *the sheikh* ate the prey we brought in." A Lur born among the black-tented nomads of the hills to the north compared his clan of a generation ago to the vulture whose victim dizzies in trying to escape from the deathly shadow circling over his head in midafternoon. Then there are the "mahalli," traditional Persian peasants farming the land around their high-walled villages since before the time of Cyrus, caught here between the tribesmen of Arabs and Lurs—ground birds, partridge and francolin, tasty game for both sides; "if not shot, then caught in nets, eggs and all—after the wheat was brought in. Like the partridge himself, we are now protected by the King's law."

A local proverb observes that "in years of oppression, even birds die in their nests." Peace must precede prosperity, and the heartiness of birds in the face of disaster is a measure of what men themselves can stand.

Although the village of Rahmat-Abad is located in the midst of the new agricultural development scheme, its own and the immediately surrounding lands have not been modernized. Thus the villagers continue to live as they did for millennia in small, mud-brick communities, generally comprising some 35–45 farmers, landless laborers, shepherds, and wood gatherers and their families in each community. Along with the anthropologist herself, they live in the simplest of one-story homes, several rooms per family serving as storage for grain, blankets, and farming gear; we cook, sleep and eat outside on the ground most of the year. The village is composed of compounds, each of which includes several families or more, a father or grandfather and his lineage who may only prepare a single common pot of food among ten adults and eight or ten small children.

Each landholder in Rahmat-Abad works nearly 10 hectares of land. We have a village school, three literate adults, a small mosque belonging to a darvish order, and several budding village stores in people's houses,

selling tea, sugar and matches. Itinerant peddlars, even the occasional magician and strong man, beggars and faith healers, money lenders and wholesale agricultural buyers from town, government malaria-control teams and those innoculating against cattle diseases, relatives from far and near, and a travelling barber, all visit the village upon occasion. An anthropologist is the latest comer. On the whole they, like the birds in our village, come and go without special notice from the long-enduring community, though each has his purpose and relationships. "The dog barks —— caravan moves on." But the birds, like the peasants themselves, will adapt to the new environment through which they travel together.

Fundamental to the code whereby both birds and men have occupied their inherited land together here for millenia is the Islamic dietary law regulating the villagers' use of their environment. This law extends to the domain of birds as well, which it divides into the benevolent and the harmful, a thoroughly religious distinction dictated by the Prophet Mohammad himself. Some birds are *helal*, or safe, healthy to eat; others are *haram*, forbidden. Local religious authorities attribute this distinction to Koranic law which designates birds with a crop as clean and those without a crop as unclean, those with webbed feet as clean and those that soar and glide in flight as unclean, (as distinguished from birds that only flap-flap their wings.)[1] This may in fact have derived from the earlier Mosaic proscription against the consumption of flesh-eating birds, all birds of prey having crops and most of them gliding in flight as they hunt. Or it may be an additional dietary regulation governing birds, drawn by analogy from the Koranic taboo of shellfish.

Whatever the origin, clergymen of the town are found to agree quite consistently in their classification of edible and forbidden birds on these bases, and the villagers adopt the same religious dichotomy. From urban mosque and Koranic school men of The Book have provided the general rule—and its theory—for correct behavior. But in fact the hunting and eating of wild birds is not often *their* pleasure as it is, rather, the enjoyment of villagers. Thus a complementary principle, formulated in the same religious language, may underlie the religious rule and may in fact govern the villagers' own deviations from the churchmen's proscriptions.

This basic principle, in no way conflicting with the religious law, may be an enrivonmental one: After all, the peasants, unlike the clergy, share the birds' rural habitat; birds useful to them are generally protected in the village by religious taboo, while others are acceptable—or even advertised as healthful to eat—which harm crops, which are not crucially beneficial to the farmer, or whose local population does not require such

cultural controls on human predation.* The proverb, "Be gentle with the hawk and harm the sparrow," may have ecological as well as sociological roots.

Thus we find that in many cases religious classification quite naturally coincides with sound ecological principles. In other cases, however, the villagers' custom seems to have adapted the law according to local environmental perspectives. Islam, itself rooted in desert life, pays great reverence to the delicate balance of natural forces at man's disposal. In nearby Baghdad, the City of Peace, the Abbasid Caliphs had their craftsmen fashion a great tree of gold and silver among whose replications of their species in nature. It is said leaves pcerhed warbling birds of the same precious metals, meticulous that the Islamic artisans of this sacred city even devised music boxes that imitated the various melodies of the birds. "Later, in the courts of Persia," one devout Muslim lamented, "secular instruments of the Mongols were favored—drums and tars among cushions of silk, in place of silver bird songs in a golden tree." In Rahmat-Abad, however, the birds with their many relations to mankind have not yet been replaced.

Predatory Birds

The villagers' practice of avoiding birds that are *haram* most consistently corresponds to the religious taboos of townsmen with respect to the flesh-eating birds that have no permanent crop:** we eat no buzzards, vultures, hawks or eagles. Though these birds are scavangers and thus live off refuse, they are among the most prominent birds in Persian folklore, not only because they are flesh-eaters, but also no doubt because their work is so helpful to men. Last week they cleaned away the body of an old horse who, returning from a day of hauling rice seedlings through the mud, was ridden in fast pursuit of a run-away mule, and collapsed and died in the afternoon sun. The owner that evening looked out over the wall at the dead animal and prayed aloud, "When will the birds come to take the horse away?"

Embodied in a bird of prey, the supreme symbol of virility, the

* This might also explain why Thesiger, great traveller among the marsh Arabs to the south of here, observed that these same religious prohibitions with regard to birds vary from tribe to tribe and place to place. 2.

** The crop is a dilation of the esophagus of a bird primarily for the storage of food. In many birds, including birds of prey, the esophagus is only temporarily dilated, thus not appearing as a permanent enlargement. However, in most ducks, storks, and cormorants this enlargement is permanent though unspecialized and small. It is in seed eaters and many insect eaters, domestic fowl, pigeons and numerous songbirds that the dilation is most conspicuous, food being stored and softened there by secretions and body heat.

avestan god Verethraghna appeared

> Grasping prey with what is lower,
> Rending prey with what is upper,
> Who of bird-kind is the swiftest,
> Lightest, too, of them that fare forth.
> He alone of all things living
> To the arrow's flight attaineth,
> Though well shot it speedeth onward. (Carnoy 272)

These flesh-eating birds, mainly living in the *sahara* (land beyond the village confines), eat rabbits, large rodents, and other creatures damaging crops; they also prey upon young foxes and many animals that threaten sheep. The griffin vulture's local name, "karkahz," cannot help but suggest itself as the origin of our English word "carcass"; this bird is protected by custom throughout the world for his important control of pollution and disease by scavanging. In fact, at the peak of the Achaemenian empire (fifth century B.C.) the Persians of this region worshipped Ahuramaz, the hawk-sun god, known to the rival Egyptian monarchy as its own protector, Horus. Depicted in royal tombs of Khuzestan, this great hawk enfolds the Achaemenian king and his domain within his broad, outstretched wings.

However, in the village of Rahmat-Abad today the eagle is even more highly esteemed. "So strong he can kill porcupines without a quill penetrating him." And long-lived, too: Once the eagle and the snake were following a village of men through the field at harvest time when they all came upon the Prophet Mohammad lying ill and thoroughly spent. The reapers left him there in a hurry to cut their grain, but the eagle and the serpent remained by his side to shade the Messenger's face from the hot sun. For this, God decreed that the life of each would forever extend beyond a century, a peaceful co-existence that villagers attribute to their relations in contrast to the ancient Indo-Iranian opposition of the two: which would have the white falcon even kill the serpent with its *wings*! (Carnoy, 291).

In the mythical story of the slaying of the dragon that haunted the river Kashaf, the most astounding evidence of the dragon's great power is that it waved through the air instantly destroying all the birds of prey, *scorching the vulture's feathers with its blast*! and dragging swiftly-flying eagles from the air. To annihilate these birds' victims on earth is one thing, but to scorch their own very feathers as they soar out of reach (or fail to do so) is the ultimate measure of power for creatures on earth. (Carnoy 330).

Despite these semi-divine aspects of the great birds of prey, a Bakhtiari tribesman settled in Rahmat-Abad village tells me that it is not sinful

to kill the eagle if it threatens young lambs, (or chickens on the threshing floor), and if watchmen are few. The bird is brought down with bait, and then struck from behind with a well-aimed club—one blow is all one can count on. When I asked whether my friend had ever seen this done, he laughed. "Only by Bakhtiaris! Can any other man match an eagle!?"

The Bakhtiaris will also kill and eat the occasional buzzard—but only in anticipation of a wedding. This is because a pair of strong buzzard wing bones, dried, carved, and coupled with silver bands, provides the finest of highland flutes, the mountain shepherd's companion rarely heard in the gregarious, close-knit villages of the plain. As these flutes are not sold commercially, each individually crafted for the celebrated couple, the buzzard species is not endangered by their contribution.

Two flesh-eating birds that prefer living within the village are the owl, (called the Blind Man or the Squinter) and the kestrel, both taboo. These birds serve the community by feeding on rats and mice, rodents so numerous and harmful that their periodic over-population accounts for many villages being abandoned after some generations, a clean site being built nearby. When this happens, the owls take over the ruins, as they are also believed to do in urban cemeteries when the mourners leave, feeding on the mice among townsmen's bones. This species of owl is called Hen of the Graveyard; the Lur dialect, which provides so many descriptive bird names, calls him the Cooch, a gentle, meditative guardian of the dead.*

Carnoy believes that Ashō-zushta, the bird that recites the Avesta and thereby frightens away the demons, bears the theological name of the owl in Iranian mythology. When the nails of a Zoroastrian are cut the faithful must pray to the owl, consecrating the nails to him for spears and knives, and sling-stones against the Mazainyan demons. The owl then eats the nails over which the charm has been chanted, vanquishing the fiends. In the Veda, too, the owl has sacred tasks, for just as a bird brings messages to Yima in the Avesta, so too the owl is the envoy of his counterpart, Yama, in the Indian myth. (Carnoy 290, 312.)

The owl and the hawk are often considered to be competitors in

* Other onomatopoetic names in the Lur dialect include the Tuhee-Tuuhee, a type of partridge; the Shepeleesh, swallow; and the Kok-Kolu, country sparrow. A typically colorful name is given to a small playful ground bird similar to a roadrunner, which the Lurs call The Shepherd's Tease, as it taunts the boy, hopping just out of reach until his flock has gone astray. Although The Shepherd's Tease has a crop, he is taboo and, for the sake of the sheep one can see why! Onomatopoetic names in standard Persian include the Bulbul and the Laklak (stork.)

their predation, though villagers suggest that each has his separate territory appropriate to his own personality, (true for quite a number of birds.) Cooch makes deserted places his domain, quiet and timeless, while the hawk is aggressive, a warrior to be mistrusted no less than his companion the snake. As among men, there is tension in the air when one rival invades the "place" of the other. Again, the birds provide a parable for men: The hawk stopping on the ruined wall of an abandoned village explained that he was merely resting there in the midst of a warm day's hunt. The perceptive owls protested, "You liar! You are really out to lay claim upon our homes as you plead for hospitality as a weary visitor."

Discussion of birds of prey in Khuzestan would be incomplete without a village inquiry into falconry. Older villagers have described the white falcon and its flight, though the only men who claim first-hand knowledge of the sport speak of it with reference to the tribes, both Arabs of the plain and the mountain Lurs: Falconry is not a peasant's pastime. In each case the birds used in the olden times were appropriate to the geographical demands. One rugged Lur of recent immigration to our village used to see mountain nomads hunting hare or pheasant with a goshawk; whereas the Arabs would use the saker falcon—because of his size and his resistence to tremendous heat on the plains—to bring down the large and very tasty houbara bustard. It is said that one Arab sheikh living not far away still trains white falcons, although, as he has become a man of modest means—and perhaps also wary of game laws—he only rides an Arabian stallion to the hunt.* Yet some sheikhs, especially from the Trucial States or Kuwait, still mount convertibles for hunting with falcons, shooting the bustards from the steering wheel when they cannot bring them down with hawks.

The falcon of course dominantes regal poetry and imagery in Persia, and to the extent that Iranian legend has come down (or *out* from the city) to the villager, he is distantly aware of this great figurehead of his people, this supremely proud yet submissive servant of the Shah. For example, Rumi the famous thirteenth century Persian poet compares the wayward soul ultimately bound to the call of God, to the falcon that

* The Arabs work almost entirely with falcons caught on migration, while Persian falconers also use nestlings. From the technical and aesthetic point of view, Arab falconry is generally considered less elegant than classical European game hawking although in this very respect it is probably far closer to the original sport. One of the great classics of falconry literature is the Persian *Baz Nameh-i Naseri*, a remarkable work. For instance, long before thyroid-association with bird moult was recognized scientifically, Teimur Mirza, author of this work, described causing a falcon to moult by feeding him "throat glands" of sheep. 3.

returns, with desire, to the forearm of the Sultan. And in the *Shah Nameh* it is the falcon that bears out the sunny crown of Kai Kobad to place it on his head ; Rustam is compared to this great white bird of prey. (Zimmern 75–6)

Periodically in our part of Khuzestan there takes place an extraordinarily eerie gathering of the birds of prey, summoned by modern agriculture to what seems to be a preternatural feast that fills the villagers themselves with awe. The famous sugar cane plantation belonging to the government at nearby Haft Tepeh seasonally burns off the fields of cane, which even in itself is a fearsome spectacle; but far more so is to behold the hawks, falcons and eagles, the vultures and other birds of prey fill the sky to swoop down upon the rodents and hares driven into the open by the flames of the great conflagration. For those villagers working on the sugar cane plantation at Haft Tepeh the event is an exceedingly evocative one, suggestive of the Last Judgment.

Insect Eaters

Like the birds of prey, many insect eaters have no crop and thus are protected by the Islamic code; like the former, also, they are generally very helpful to the villager, the range of their contributions being quite wide.[4] Two of the most colorful birds of our landscape are the bee-eater and the Indian roller, both shy, flashing brilliant blues through the ripe wheat fields or an elusive dot of emerald shimmering among wildflowers along the old canal. The roller is well deserving of the villagers' nickname for him, Little King.

The bee-eater does indeed eat bees. At least from the Achaemenian period onward, (fifth century B.C.) we know that honey has been economically important to the villagers here, formerly their main source of sugar; while today many orchards have fallen into disrepair, even now some in the area are famous for their honey. The bee-eater can be a detriment to a healthy orchard, preventing the bees from doing their work, though traditionally the villagers' own source of honey was a modest comb under the eaves of the house. There the bees were never threatened by the bee-eater. Thus the villagers consider the bee-eater beneficial; in Rahmat-Abad they are not even aware that it eats bees. Instead, they appreciate its relish for wasps and related stinging insects which some say may cause death by a serious sting on the head.

On the other hand, in the large orchards the bee-eater is a menace. As spring comes to the orchard travelling bee-herders, who move northward with the warmer season, will contract with the landlord for a period of days to pollinate his trees with their bees. After a few days in the orchard, one evening at dusk the bee-herder drives his bees into their

hives with smoke, plugging the exits, and during the night moves them by truck to an orchard at a higher elevation where the trees are just blossoming. For these bee-herders the bee-eaters can be very damaging, taking a critical toll of the bees.[5]

Among the Arab historians and geographers visiting northern Khuzestan after the Islamic invasion, the region was famous for its orchards and vineyards. (The proto-Elamite tablets of the end of the fourth millenium include signs representing orchards as early as then!) Mukaddesi, who travelled here in the tenth century, and Mustawfi coming in the fourteenth, especially praised these orchards. Probably some of the fruits they extolled had been introduced into the region during the period of Sassanian agricultural development referred to above, which included important crop innovations as well as irrigation construction. Above all, the Arab travellers marvelled at the grapes and oranges, (an Arabic-root word itself); a famous syrup was made from raisins as well.

The birds have continually damaged grapes and threaten serious destruction of a new import, strawberries. The experts' present advice for counteringt heir damage even of large farms is once again the practice of the most traditional village peasants in Rahmat-Abad: pick early, before the birds are attracted. The birds may not win, but they exact a compromise, the grapes in the Dezful bazaar often being small, and the strawberries a shade green when purchased at the farm gate.

A second pair of insect eaters protected by custom in Rahmat-Abad consists of the two songbirds, the swallow and the bulbul. The former, whom the villagers call the Worshipper, resides right inside our houses while mating, nesting and singing in the spring. As this bird is a keen fly eater, his welcome to the house during the flies' very heaviest season may not only be explained aesthetically. In my village every doorway is built with an open window above the door for the birds to come and go. And although droppings from the nest may be disturbing below, particularly when the weather is still too cool for everyone to move outdoors for living, yet no villager will remove the swallows' nest from the rafters. Rather, some people go to considerable trouble with cardboard and twine, hammers and ladders, hanging little platforms beneath the nest to catch the droppings.

The swallow's beautiful song is truly a religious wonder to my neighbors here; the smallest village boy can quote the particular poetic passage in the Koran that this bird warbles out to each spring morning. The Worshipper is a Haji, said to journey to Mecca every year in winter where he presents this fervant trill from Rahmat-Abad to the House of God, and renews his "breastful inspiration."

The bulbul, black bird with bright yellow markings under his tail,

has a lyrical, melodious song.* However, he also pecks away at certain spring fruits—not those of commercial value to our village, but rather those eaten at home. When we begin lunch with a few crabapples, pomegranates, or figs we often remark that the bulbul has sampled each one before us. The villagers excuse this and the children will argue that he was really after a worm, but custom dictates a minor ecological compromise: you mustn't kill this songbird, but you are quite free to cage him. As for the children's defense of bulbul, *their* favorite fruit are the small, sweet berries of the ubiquitous konar tree, but it helps to be in league with the bulbul to shake down the ripe ones: "Bulbul, bulbul, here's a konar," they sing; "God gave it to you. Come, tap away and eat! And God gave it to me also! Make plenty of them fall right here for me!" In the children's opinion, the bulbul living in konar trees, (Christ-thorn), has a sweeter song than his cousin who nests in the date palm, and many villagers agree: Too much sugar spoils one's tune.**

The nightingale, a common summer visitor in Khuzestan, arriving from Africa in late spring to breed, is also protected by village taboo. Not many villagers distinguish him from the bulbul, but those that have heard him from nearby are certain of his more refined song.

A pair of the most hard-working and unpretentious of village birds are the cattle egret and the lapwing. The former, scientifically a buff-backed heron, is found throughout Asia riding on the backs of water buffalo and picking off their ticks; the Arabs call him The Water Buffalo Boy's Companion. When I inquired why he leaves for the summer—(many humans and range animals, so presumeably also birds, finding the soaring temperatures to be unbearable)—the boys who tend our buffalo take up for their friend. "It's the *ticks* who find it too hot; he'd never leave Rahmat-Abad except to keep after them!" And indeed, the cattle egret has an ancient claim to village cattle, being portrayed riding on the back of a cow, as the central figure on vessels from this region as early as the thirteenth century B.C.![7]

One picturesque phenomenon already affected by the encroaching modern canals, and inevitably doomed to elimination, is the ubiquitous herd of water buffalo, often immersed to their eyes and noses in the rivers and canals. The cattle egret will have to find a new perch from which

* Bulbul is acoustic in origin and is applied to several good song sters, especially the nightingale. Only in the ornithological literature is it restricted to the family Pycnonotidae. The latter is not found in Asia Minor or in northern Iran, where the name *Bulbul* is commonly and almost invariably applied to the nightingale. 6.

** Villagers who have worked farther south in the date-producing regions of Khuzestan, where the bulbul can be very destructive, report many an evening's meal of the bird.

to dine upon insects around these cattle: the buffalo, who must stand in water during parts of each day, are not offered a plunge into the expensive cement canals, and thus will soon disappear. Other than those many connoisseurs who enjoy the rich water buffalo ice cream of Dezful, the cattle egret may be the only one lamenting the extinction of this enormous beast from northern Khuzestan, as it is certainly no longer needed for plowing, and its fatty milk is rapidly being replaced by pasteurized cow's milk. Yet the egret himself will doubtless survive long after his primordial companion, the buffalo, is gone, as several of the giant new agribusinesses plan to specialize in cattle raising. Feet firmly planted for centuries in the matted hair of the black buffalo, now the egret can look forward to the plush carpet of a spic-and-span Holstein or Charlais, that will serve equally well to stir up insects for him from among the grass roundabout.

The lapwing, in Persian called a Gipsy Rooster and in the local Lur dialect called an I-Spy-You!, warns villagers of thieves and in general of anything unusual in the area. The villagers claim that for weeks—until he saw *them* trusting the anthropologist—the I-Spy-You! announced my approach when work would take me to them in the fields. In the period before Reza Shah the Great, father of the present ruling monarch of Iran, security in the countryside was minimal especially at night and at harvest time, though sheep and cattle rustling were common in the day as well. The I-Spy-You's were—and to a lesser degree still are—indispensable watchdogs sending out quick alarm. There is some indication that, as brigandage has almost completely disappeared in the past decade, the I-Spy-You! may gradually be losing his protective taboo. A few villagers have confided to me that during the past several years they have discovered his meat to be a delicacy.

Finally, formerly contributing in her most unique manner to village life though now being superseded by mass production, is the handsome hoopoe with her outlandish crown. Wearing her feathered headdress she parades through the grasses or bushes in "a continual prissy pose," earning herself the local name of Self-Self. (Urban Iranians, including scholars, pronounce her name *hud-hud*, which has no apparent meaning; it is possible that the villagers have typically altered the more "scientific" urban pronunciation to *khod-khod* to create an appropriate pun.)

The eldest literate man in my village, a settled Bakhtiari tribesman in his 60's who somehow learned to read and write decades ago when these skills were exceedingly rare in the countryside—and then used only for the special occasion—this man considers the blood of the hoopoe to be the finest writing fluid available. Clearly a man of discrimination and experience, he deplores dispensable plastic ball-point pens which are

appropriate only for school children and office clerks who write no words of substance anyway. In the old days, camp agreements as well as the occasional letter to your brother in jail were always written by a scribe in the blood of a freshly-killed hoopoe. It may be for this contribution to the pen of the learned that the hoopoe is also called King Solomon's Hen, regal in the crown she wears.

In the earlier folklore of the Indo-Iranians the bird Karshiptar also had a highly intellectual role in the affairs of men. The primeval king Yima assembled mankind for Karshiptar to convert them to the religion of Mazda, whereupon they all, together, recited the Avesta in the language of birds! (Cornoy 290).

Rare Migratory Birds

On the whole, unusual migrant birds seen in the area of my village only for a few days are also taboo, often considered to be foreign pilgrims to Mecca. Avoidance of their meat is characteristic Iranian hospitality, though also perhaps due to peasants' unfamiliarity. There are numerous species of such transients through Khuzestan, and not much seems to be known about their migratory habits—some travelling individually and some in large groups. Many species arrive in the Zagros from eastern Europe or western Asia and come through our area en route to the Nile, thence into central and south Africa. Thus it may be true that they pass over Mecca, if they cross the Arabian peninsula from Kuwait or Bahrein, as some authorities believe; but probably few actually winter by The House of God.

Grain Eaters

The birds which receive no hospitality in our village, except when gently laid atop a tray of steaming rice, are, above all, the grain eaters.[8] Here the villagers go all out: sparrows and pigeons and marbled teals are considered delicacies, crows are said to have medicinal value (as, indeed, they are the most precious of birds in the Avesta), and corn buntings and starlings are good game for sport if only a poor man's meal. The rose-colored starling, called a Sayed because of his black turban, the distinctive dress of all men claiming direct descent from The Prophet, is nevertheless canonically edible, but the bunting, while killed, is not.

It is in considering the mythology and folklore of the grain eating birds that we come closest to understanding the Iranian villagers' sensitive and reasonable science of ecological systems, and we may surmise that the grain eaters lie at the heart of their ornithological myths because these peoples are, after all, first and foremost grain eaters themselves. Even when little milk is available from cows, sheep, goats or

water buffalo, the Iranian peasant depends upon his wheat and rice, and has done so for millennia. Thus it is appropriate to find sparrows, pigeons, crows, and related grain eating birds closely associated with regeneration, health, curing, and fertility . . . even though they are less forceful and dramatic than the birds of prey.

Crows, sparrows and pigeons all have their local and their "country" types—the mountain crow, the country sparrow, and the wild dove. The meat of the black local crow (or raven), forbidden by the churchmen, is recommended as a general cure-all especially for malaria or prolonged illnesses. He is peculiarly fond of soap, but as the women of Rahmat-Abad wash with Tide and special local plants nowadays, he picks up fewer tidbits at the canal bank after they have finished their work than he used to. On the other hand, the lighter-colored mountain or "hooded" crow, who follows our village pilgrimage up a traditionally sacred peak in the spring, is customarily not eaten.

It may be that the raven's blackness is what gives his meat medicinal power. Black storks, black domestic hens, and occasionally coots are also reputed to have curative powers, especially when "offered" at particular holy places along with the proper invocations. A man in Rahmat-Abad recovered from temporary facial paralysis when he slept one night beside a dead black hen at a popular folk shrine now on the edge of Dezful. When his wife was having difficulty finding an all-black hen for the offering, I was told that a coot would be an acceptable substitute.

Indeed, the raven in Mithraic solar myths is the messenger of the sun, whose healing powers restored Zoroaster himself when he fell victim to a curse. Ahura Mazda instructed Zoroaster to take a feather of the raven and stroke his body with it to regain wholeness, for both the bones and the feathers of the raven are magical. One who carries with him a raven feather can neither be slain nor routed by a foe of brilliance. Similarly, the great bird Saēna, (the Sīmurgh of the Persians) gives the father-hero Zāl one of his feathers when Zāl leaves the nest of the bird who has brought him up:

> Bear this plume of mine (the Sīmurgh told him)
> About with thee and so abide
> The shadow of my Grace. Henceforth if men
> Shall hurt or; right or wrong, exclaim against thee,
> Then burn the feather and behold my might.

Later on when Rustam's mother is opened up to bring the child into the world, Zāl heals the wound by rubbing it with this healing feather of the Sīmurgh, and when Rustam is bounded to death by Isfandyar he is cured in the same way. (Carnoy 290).

At the moment when Kai Khosrau bids farewell to his nobles in the *Shah Nameh*, knowing that he is going to die,

> "the nobles were troubled when they heard his words, and the slumber that fell upon their eyelids was filled with sorrow. But when the raven of night flew upwards, and the glory of the world flooded the earth with its light, Kai Khosrau was vanished from among them." (Zimmern 272)

Sparrows are far humbler grain-eaters but as such enjoy much homelier associations with the villagers of Rahmat-Abad. The country sparrow that remains around the village and feeds on house insects is less commonly consumed by peasants, although the yellow-throated field sparrow, highly destructive of wheat and other seeds, is eaten with relish . . . the relish of vengeance, a spice not flavoring the same dish among townsmen. These sparrows, moving off to summer in the Alborz mountains in mid-May, depart well fed, as before going they scour the countryside of wheat and barley, adding new grains to their taste as these are introduced from abroad. Like pigeons, they are shot, caught, trapped or poisoned in numerous ways, usually cooked in soup or roasted on kebab spits. The easiest way to trap a half dozen for supper is by propping up one side of an inverted reed basket on a stick, which is tied to a long string. Place kernels of grain in the open ground shaded by the raised rim of the basket, and sit at a distance nursing the baby, cleaning rice, mending clothes. The sparrows will come to eat your grain; pull the string and they find the tables turned. Despite the great numbers o field sparrows sold in the Dezful bazaars every day, city people also eat the house sparrow. The former has no crop, though the latter does.

The house-sparrow is often seen as analogous to the villager himself, up against odds that he cannot overcome and seeking, in the end, whatsoever refuge he can from the difficult environment. A house-sparrow came to Solomon and complained of the violence of the hot winds from the desert. "It is impossible for me to fly where I must go to collect food for my family to eat," the sparrow explained; "order the wind not to interfere with my work." Solomon listened to the complaint, and then, as was custom in his court of justice, he summoned the defendant to present his side of the case. The wind came, at first quietly, then growing stronger and stronger in his onrush. "Oh, Your Majesty," cried the house-sparrow, "I withdraw my protest! I shall be exhausted before the Wind even arrives at court, as even the breeze that precedes him is too strong for me to withstand. I pray you, let me return to live as I can with the wind."

When we turn to the third pair of grain-eaters, the wild or "Arabic"

pigeon (turtle dove) and his village-dwelling cousin, we find that here too, just as with the crows-ravens and the sparrows, villagers distinguish between a local or domestic species and a wild or field-dwelling cousin. And as is to be expected, the bird dwelling around the village, in the eaves and trees of the compound, is protected by taboo, the field bird consumed. Both the wild and domestic pigeon have crops, but only the "dusty headed" wild dove is prized for eating, being shot or trapped as the field sparrow. Eating the meat of the turtle dove is said to resemble drinking pure oil, for his bones "are as delicate as fish bones." After all, in ancient myths the wild pigeon, too, has been the envoy of Yama, the lord of the settlers. Nevertheless, not even on No-Rouze, the Persian New Year, does a villager invite his most helpful government official to turtle-dove stew, as these birds are said to be protected by the Shah's law if not by Allah's.

The dove, along with chickens and other domestic fowl, are all natives of Asia. It was from Khuzestan that these birds were introduced into Europe during the Median Wars of the fifth century B.C.. In early Iranian mythology the domesticated rooster was partner with the domesticated dog in protecting the house against demons and in helping Sraosha destroy fiends that threaten the home. (Carnoy 292).

The central importance of grain in the Iranian villagers' ecological system is thus richly illustrated by myth and folklore, and it is no wonder that the grain-eating birds play a significant role in villagers' symbolic constructs. Indeed, the intimate connection between birds, water, and grain is dramatically crystallized in the Mazdean myth of Saēna, the Sīmurgh of the Persians, who spreads his wings over the earth forming a vast rain cloud full of water. This most celebrated of birds rests on the Gaokerena, the tree of the eagle, in the midst of the sea Vourukasha, and when he alights upon the tree a thousand twigs are shaken open, their rich, regenerating seeds falling in all directions into the water and earth. When the Sīmurgh rises from the tree aloft, then, a thousand new twigs shoot forth to replace those that have given forth the grain.

Near this great bird sits another, Camrōsh, second only to the Sīmurgh. When the seed is shed from the tree he collects it and carries it to the place where Tishtrya seizes the water, mingling it with the seeds of all kinds, and raining them down on the world. Carnoy tells us that when the Turanians invade the Iranian districts for booty, this bird Camrōsh swoops down upon them and, the supreme grain-eater, picks them up kernal by kernal to devour the non-Iranians just as a bird eats corn! (Carnoy 289)

The agricultural innovations now taking place in Khuzestan promise the seed birds unparalleled benefits. Milo, a feed crop introduced from

abroad for the essential upgrading and expansion of livestock herds in the region, offers a feast for obliging pigeons, sparrows, starlings, even corn buntings and crows. On a small field—such as a one-hectare plot at the Safiabad Trial Farm—these birds may destroy 100% of the crop; in larger fields it is estimated that they consume up to 50% or 60%.[9] One foreign technical advisor claims that this is the greatest bird destruction of milo he has ever known, although he is confident that the birds can be brought under control.

The same birds continue to threaten the traditional crops as well, especially wheat; and they have made the cultivation of sunflowers—otherwise ideally suited for large-scale commercial farming here—virtually impossible. Though wing-loose and wild, Khuzestan birds recognize bird-feed for what it is.

Game Birds

Related to the domestic fowl are the numerous partridge and francolins of our village fields and outlands. Eating these birds, of no particular benefit to the Rahmat-Abad farmer, is approved by religious law and highly recommended by local custom, although in some cases not by the game department. Since few villagers openly posses firearms nowadays, shooting these birds is the prerogative of village school teachers or sportsmen from the nearby army base. The villagers, knowing their fields and fallow lands intimately, willingly offer hunting advice when asked, although the accuracy of their information depends more on their own hunting interests than it does on their intelligence, a fact not fully appreciated by some disappointed urbanites sporting away fruitless afternoons at the peasants' direction.

For their part, the villagers trap game birds with nets, sometimes catching them by hand. Shepherd boys may bring home several pintailed sand grouse each evening during the plentiful season. In the mountain foothills the Lurs make blinds of cheap, brightly-printed cloth from the town bazaar, stitching on additional wildflowers to assure a convincing effect. (Men who live near birds attribute to them the intelligence due to proper neighbors, while men seeing them from afar do not, I am told.) The eggs of these birds—up to 18 or 20 in a nest—are also delicious, and a partridge sold alive in Dezful may bring as much as 30 tomans, $4.

However, there seems to be a certain reluctance among some tribesmen in the nearby hills—and their relatives settled in my village—towards killing the rock partridge who is renown among them for the appealing sounds it makes. Before heading up to summer pastures in the spring, Bakhtiari nomads often catch this bird alive and clip its wings

for company on the highland migration; perched atop teapots, Persian rugs, tent gear or a new-born goat, the bird sings its way along the long trek. Dr. Derek Scott, a prominent British ornithologist specializing in Iranian wildfowl, denies that anyone could describe this bird's "chuckor, chukor, chuck—koor . . ." call as a "beautiful song";[10] when questioned again, my village informant suggests that the British scientist has never climbed the heighth of the Zagros to the totally unaccompanied melodies of wailing children and bleating sheep!

Water Birds

"And seeing a water-bird fly upward, he
took his bow and shot it through the heart,
and it fell among the rose-gatherers."
(Zimmern, frontispiece,
from the *Shah Nameh*)

When we turn to the water birds we come face to face with those wild birds who have the greatest stake in the changing system of Khuzestan waterways, and at the same time are among the oldest hunted birds of the region, according to archaeological record.[7] Excavations conducted by the University of Michigan team at nearby Deh Luran indicate that almost all of the water birds of significance to people in Rahmat-Abad today were also important to settlers here as early as 7000 B.C.. At Tepe Ali Kosh, probably a mixed hunting-herding-collecting winter camp, bones of geese, mallards, cranes, storks and herons have been found. Also represented are the partridges, the crow, and a number of thrushes, the last two being the only field birds. Still, "only a tiny fraction" of the meat consumed in this camp appears to have been provided by birds. On the basis of archaeological evidence it is surmised that "most of these birds were shot with arrows by hunters going after larger mammals, or brought down by shepherds with slings . . . Systematic hunting of birds with nets, traps, or trained predators seems unlikely." Later these birds are joined by important additional ones still of relevance today, found in sites of the Susiana and Proto-literate periods, (end of the 4th millenium). These include the cormorant, eagle, moorhen and pigeon. There is textual evidence from areas in nearby Iraq indicating that pigeons were domesticated as early as this time, but the actual bone samples available are insufficient to test the proposition.[7]

By the fourth millenium the village proper had definitely emerged in northern Khuzestan, including the simple housing compounds typical of Rahmat-Abad today, and even some larger, more elaborate compounds on platforms for families of higher rank. In this period "the birds of prey are an intriguing addition: Are they hunting more, near the fully

settled Susiana communities, or are they being brought in in early Susiana times for their plumage?"[7]

The six most prominent water birds known to our village are storks, coots, ducks and geese, cormorants and kingfishers, although we also have pelicans, herons, egrets and terns in the nearby vicinity along the rivers. The stork is especially fond of rice paddies, but also frequents our vegetable fields which enjoy constant irrigation. In both areas villagers are grateful for his predation on harmful snakes, which one all-too-often comes across while weeding or picking vegetables. He also loves locusts, although it is unlikely that any birds can have an effective control over locust plagues which until recently used to destroy all the crops of a region periodically. (Notwithstanding the Indo-Iranian attribution of locust-control to the magpie; see Carnoy 291). While the stork has a crop, it is a very small crop; villagers have eaten stork meat and most people attribute to it a kind of limbo status—neither forbidden nor encouraged. It appears to be more commonly eaten in areas of dry farming where peasants are not endangered by water snakes in their work. Having this same neither-nor status, coots, known as Arabic Water Hens or Arabic Ducks,* are usually not eaten but are also not forbidden. In many cases coots may be harmful to farmlands.

The wild mallard, itself numerous and edible, winters and nests in Russia. It is hunted by canoe in the dark along the Caspian shore—"in the mist, with a pale oil lamp and a soft gong—at the rate of 50 or 60 in a good night's catch." This vivid vignette from the northlands was contributed to our local bird lore by a villager earning off-season pay on a construction crew in Dezful, related to him by a worker from the Caspian region. In Khuzestan these ducks are netted by the Arabic-speakers along the rivers as they fly up in a flock when flushed from the reeds, or from the air are attracted to a small body of water by a single

* In the village dialect, ducks share the distinction cited earlier with respect to pigeons and sparrows. In each case a "local" species (mallards, house pigeons, and field sparrows) has a counterpart species designated as "arabic," (coots are Arabic Ducks, wild doves are Arabic Pigeons, and house sparrows are Arabic Sparrows.) Whether there are any geographical or historical justifications for these dichotomies, or whether they employ any consistent linguistic principle, is unclear. Most probably the contrast simply denotes differences in degrees of familiarity, from the Persian villagers' point of view, when referring to a pair of subjects otherwise recognized as being similar to one another. This kind of we-they distinction runs through all aspects of the Persian-Arabic intermingling in rural Khuzestan. For instance, the qualifier "Arabic" is employed to distinguish certain musical instruments, features of dress, food and equipment of slight modifications from the standard village pattern, whether or not the variant is actually found among Arabic speakers. In turn, the Arabic speakers refer to anything strange to their own customs as "Ajam," non-Arabic.

domesticated duck the hunter has brought with him and placed in the open as a decoy. The mallard may be domesticated, and while in the wild he is monogamous, he becomes polygamous after domestication. The villagers, their own society allowing polygamy, find this to be a good lesson for still-wild foreigners.

The goose, another very early prey of Khuzestan villagers, is more highly rated than the duck for a feast; this bird was the favorite of Rahmat-Abad's landlords, who would often demand gifts of geese in payment for services performed or permissions granted. Wild geese are netted along the Karun river to the east and are domesticated as well. Their eggs are delicious but the birds seem to cease laying quite soon after capture, perhaps unaccustomed to being deprived of their efforts.

The cormorant, eaten occasionally where he is abundant, is generally considered taboo, having an unpleasant taste and a borderline crop like the stork's—permanent but very small. Besides being present in early archaeological sites of the region, the cormorant was the subject of the first patterned bird motifs of this area, during the Susiana period. We find him pictured on these early vessels in his very characteristic takeoff stance, still remarked as curious by villagers who know him today, and described by one archaeologist as a "buzzard drying its armpit."[7]

Finally, a mention of the pelican, whose crop is also indecisively defined—not really a crop, but a permanently expanded sac in the throat. The pelican is not part of the birdlore of Rahmat-Abad, although elsewhere in the region he is known, and given the suitable native name of "The Water-Carrier Man." The pelican, cormorant, grebe and a few other birds of northern Khuzestan seem to enjoy extended prospects for safe and comfortable living along the extensive water reservoirs created by each of the dams of the government's ambitious development scheme. However, as the shorelines of these lakes tend to be very steep, and their water levels highly fluctuating, aquatic vegetation is scarce, and thus not many birds can take advantage of these new ecological dimensions.

As we have seen, the wide network of new irrigation canals being installed in northern Khuzestan as part of the enormous Dez Irrigation Scheme will provide much greater surface area of water for all birds than the traditional canals did, and water that is on the whole shallower, facilitating fishing. Where the system has already been completed, the smaller birds, waders, grey wagtails, plovers, etc., now gather along the new cement canals in impressive numbers. Indeed, it may be a general rule of thumb that in periods of increased irrigation and cultivation more of the smaller aquatic birds, passerines and even birds of prey can be supported.

However, looking for new homes will be the Little Owls, Rock

Doves and the Wagtails who nest in qanats. The construction of qanats, underground water tunnels with periodic vent holes, dates from the Sassanian period or earlier; by means of qanats the Persians—and later farmers throughout the Middle East and into Spain—tapped fresh ground water in the uplands and even today conduct it, often for 10 to 20 miles, to the villages and fields of the plains. These elaborate systems were maintained for centuries and often restored after periods of invasion and disuse; Layard (p. 56–9) found most of the qanats of the Dezful region in working order a century ago, although they will undoubtedly dry up from neglect under the new agricultural systems of the area. At present qanats provide cool and secure spots for roosting, and many bird species visit them to drink.

Undoubtedly because of this intimate interdependence between men and birds on the one hand and water on the other, in this desert region, birds have long been associated with the powers of rain and the replenishment of the sources of irrigation. In Iranian myths the storm-god is symbolized as a bird, an eagle brings lightning, and the hero Keresāspa shot at the gigantic bird Kamak for seven days and nights when Kamak overshadowed the earth keeping off the rain until the rivers dried up. (Carnoy 264, 326) Indeed, the sun itself is often a bird. (Carnoy 291).

Finally, a consideration of the changing environment for men and birds in northern Khuzestan brings us to nesting and trees. Modern methods of field preparation have called for wholesale land levelling throughout the new development scheme, which means that trees are obliterated from the landscape, sending many birds, as vultures, storks, buzzards and eagles in search of new nesting sites. (Eagles return to the same nest year after year.) A century ago this area was thickly covered with tamarisk, oak, and poplars, the "most luxurious herbage" and "admirable woods" along the rivers.[10] Villagers of Rahmat-Abad appreciate the value of trees and take considerable care to plow around seedlings in a field in order to preserve them. Reflecting upon the kinship of all things in nature as they stand helplessly off against the ravages of time, the villagers say that if trees had feathered wings they could escape the strong hand of the brush-collector in search of wood. By implication, the birds' freedom to move is even greater than that of the peasants themselves.

In the *Atharvaveda* the gods in the third heaven inhabit an arboreal dwelling place, as indeed Yima did, the founder of the Persian feast of Nou-Rouz, the Persian New Year's Day at the beginning of spring. (Carnoy 315). We remember the critical role played by the bird's nest high in a tree—half-way between earth-bound man and the birds' own

freedom of the skies beyond the treetop—in the famous story of Zāl, the great mythical father of Persians who was rescued as an infant where he lay abandoned on earth (having been born bald) by the bird called Saēna, the Sīmurgh. Zāl was literally raised in the Sīmurgh's nest high above the affairs of men, out of reach, on the slopes of the Persian Mount Albourz, the guardian bird feeding and nurturing him until he became a sturdy youth. We have related already how Zāl ventured forth into the world carrying with him a feather plucked from the breast of the Sīmurgh which was his talisman in moments of danger, his "blue-steel dagger" whose "gracious shade" proved a blessing to heal all wounds. (Carnoy 331). Thus although the wildfowl of Khuzestan will doubtless find new nests in the wake of modern agriculture which has set out to clear the landscape of trees (already the birds are roosting on the proliferating cables, overhead wires and supporting towers that march across the transformed countryside), yet the mythological environment of the region can hardly replace Zāl's nest in the high tree with a contemporary eagle's perch atop a telephone pole. "The birds watch it all, they and the angels."

Late one autumn afternoon after we had been picking beans in the field, I sat with my 87-year-old neighbor waiting for the sun to set, the time for him to pray. A flock of swallows flew overhead and we could watch a hoopoe rustling in the grass. At my prompting we talked about birds; I was still trying to straighten out some of the village bird names and descriptions, match them in English or find their likes in the field manual. "Does Nervous One eat small fish from his perch on the bank of the canal?" I asked. "That small brown bird with a song like 'wich/wich/wich-ri-ri', is he the one you call Long Tail? Baba, what color breast does Stone Eye have?"

Old Nur grew impatient: "Sometimes Long Tail wants to sing this way, sometimes another tune! Stone Eye, he might be one color but his wife quite another! Call all the little ones sparrows, Khanom Grace; write down that the big ones are named hawks." He held up his hand, opened out. "One finger is long, one is short, one is fat," he said; "they're all different. Some of us are Lurs, some Arabs, Bakhtiaris, some mahalli, one American. Hosein is dark, Fatemeh is blond, Abol has green eyes. Long tail, red breast, yellow beak, prissy feathers, strong claws—everything's different, individual, each has its own job, that's all. This finger points, these two pick up bread, this one wears a ring, this one is too small to do anything. Call them all fingers, call all the birds sparrows. What does it matter? Call all the big ones hawks, all the little ones sparrows. Who can begin to name every little bone and muscle of God's hand?"

Note

1. I am indebted to Mr. V. Valizadeh of Dezful, Iran, for his generous assistance with respect to Islamic teachings about birds. He himself is considered a highly qualified scholar in this area, and is thoroughly familiar with the religious regulations of Shi'a Islam in Iran.

2. I am grateful to Dr. Robert Biggs, Professor of Assyriology at the University of Chicago, for pointing this out to me: Thesiger, *Marsh Arabs*, p. 74.

3. Col. S. K. Carnie, private correspondence.

4. Mr. Moravej Hamadani of Jundi Shapur University in Ahwaz has been very helpful in the task of identifying these and many other birds scientifically, using villagers' names and descriptions.

5. Dr. Richard Redding, University of Michigan, private correspondence.

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7. Dr. Henry Wright, University of Michigan, private correspondence.

8. Mr. Mohammad Ali Ashtiani of the Wildlife and Game Department of the Ministry of Agriculture, Government of Iran, in Ahwaz, has offered these and many other identifications and suggestions.

9. Dr. Wheeler Calhoun, agricultural advisor at Safiabad Trial Farm, near Dezful.

10. Dr. Derek Scott, Department of Environmental Conservation, Government of Iran, Tehran, in private correspondence. I am indebted to Dr. Scott for his considerable advice and information.

Bibliography

CARNOY, M., "Iranian Mythology," in *Mythology of All Races*, ed. L. H. Gray, vol VI; 1917, Boston, Marshall Jones Co.

LAYARD, "A Description of the Province of Khuzestan," in *Journal of the Royal Geographical Society*, 16: 1845, London.

THESIGER, *Marsh Arabs*, 1964, London, Longmans Green.

ZIMMERN, ed. and transl. (Firdouzi) *The Shah Nameh*, 1906, New York, Edwin Hill.