

The Flight of the Unicorns, by **Anthony Shepherd**. Elek Books, 30s

This intriguing title conceals the identity of the remarkable expedition, of which the author was a prominent member, promoted by the Fauna Preservation Society in a desperate endeavour to capture a few of the remaining Arabian oryx—one of the rarest and most graceful of the world's mammals—in order to establish in captivity the nucleus of a breeding herd. The mechanical age has enabled regions hitherto inaccessible to the hunter to be penetrated by fast motorcars whose occupants, using firearms of precision, have indulged in orgies of mass slaughter until perhaps no more than two hundred oryx remain in the wild state, the majority to some extent protected by the sanctuary of the "Empty Quarter" of ill-fame. On the other hand, without the motorcar the expedition would have failed.

It is a thrilling account of an astonishing combined operation, and above all of cheerful companionship and co-operation; but for the generous help of a host of well-wishers, Arab and Briton alike, representing many spheres of activity, the best laid plans would have come to naught. The actual catching of the fabulous unicorn is told briefly in three chapters, and it is clear that had there been more time at the expedition's disposal better results would have been assured—for an oryx had only to be viewed for it to be quickly in the bag. However, two males and one female oryx were caught and eventually taken to a zoo in Arizona to form the nucleus of a herd that is now breeding—four calves born and more expected—so the results of the expedition have proved more successful than perhaps seemed likely at the time. It was a tough assignment carried out over most difficult terrain and in appalling conditions of blistering heat, together with the need for ever increasing improvisation, and its successful conclusion was little short of miraculous. One marvels at the fortitude of the leader who carried on, gallantly and albeit painfully, with broken ribs at the most critical period of the operation, as well as at the skilful use of a light aircraft brought from Kenya which, scorning the hazards of the absence of maintained airstrips, never went wrong—indeed an impressive performance.

The author traces the history of the Arabian oryx over the past 450 years, with much of interest about the Arabs' mode of life, and there are useful appendices, including lists of birds—a pity scientific names were not checked for typographical errors—and of the vegetation and plants eaten by the oryx, and the plants collected; also a short bibliography. Pleasingly illustrated, it makes fascinating, rewarding reading and can be thoroughly recommended.

C. R. S. PITMAN.

Portrait of a Desert, by **Guy Mountfort Collins**, 36s.

Nine-tenths of Jordan is a wilderness inhabited by nomadic Beduin tribes, a remote area of great scenic beauty still redolent of the exploits of Lawrence of Arabia, but of particular scientific interest and offering unusual opportunities for investigations into problems of the ecology and conservation of desert and semi-desert areas. This book is the story of the 1963 scientific expedition to Jordan undertaken at the request of King Hussein, told by the skilful organiser and leader in the third of his admirable "Portrait" series; his characteristic discourse is simple, factual and informative. The king's enthusiastic support ensured the whole-hearted co-operation of his Beduin subjects, without which little would have been accomplished.

Goats in Jordan, as in many parts of the world, are an unmitigated plague, but other factors contribute to the ceaseless, progressive destruction of the vegetation: "a quarter of an acre of the sparse desert shrublets disappears every time the Beduin brews a pot of coffee". Basically the

Jordan problem can only be solved if heed is paid to Max Nicholson's masterly report on "The biological productivity of the desert and a long-term plan for effective measures of conservation", and conservation means not only the wildlife and flora, but primarily the vegetation and forests, and the water supplies and their development. The expedition's brilliant, twelve-member team, each highly qualified in at least one aspect of the programme, could not fail to produce results of outstanding and lasting value. The book is profusely illustrated with a remarkable selection of Eric Hosking's 4,500 photographs, the matchless quality of which is only surpassed by the diversity of subjects—vertebrates, insects and flora—including novelties which never before had faced a camera, although for the wildlife the situation is a dismal, well-nigh disastrous one. The abundant animal and bird life, vegetation and forest of only a few decades ago have mainly disappeared. The oryx and the ostrich are gone, the gazelles and the houbara bustard are near vanishing point, and the devastation of the vegetation appears past redemption. Yet throughout the operation, a striking feature was the steady, day and night, westerly movement of migrants, large and small and in great variety, on spring passage; 216 species were identified of which 86 were passage migrants only.

The enthusiasm of King Hussein and his ministers augurs well for the future, and though the practical difficulties of any programme of regeneration are appalling, a commendable start has already been made. May Jordan prosper! This book is to be highly recommended, will have a wide appeal, and is worth while for its superb illustrations alone.

C. R. S. PITMAN.

The Puma, by Stanley P. Young & Edward A. Goldman. Constable, 18s.

The Wolves of North America, by Stanley P. Young & Edward A. Goldman. 2 Vols. Constable, 16s. each.

These reprints in paper-back form are welcome. They are built to a pattern by two wild-life biologists who have worked on the species in the field and have thereafter combed the literature thoroughly and judged it critically. The authors have also gone over the museums and the taxonomic literature in careful manner to provide a reliable and up-to-date section of each work on regional types and sub-species of these animals.

The puma, mountain lion or cougar, and the wolf were among the widest distributed of all animals on the continent, which fact indicates the wide distribution of hoofed game. But the wolf does not go farther south than the Mexican plateau, whereas the puma goes on through to Patagonia. The puma does not appear to be found farther north than north British Columbia, and then not on the west coast. Yet there are constantly rumours of this animal being seen in Alaska. I think the wish is father to the thought, and may indicate the hidden confusion in the American mind, which has pushed the mountain lion back into the Rocky Mountains and the south-western States, and yet greatly admires the animal and would be glad to see it farther afield. From my own enquiries, it would seem that the puma is losing out: even in the large national parks like the Grand Canyon, the species is not holding its own. The puma travels and needs a lot of room. No national park is big enough to give it effective sanctuary; and when you have such absolute land-using rights as to own an in-holding of 10,000 acres *within* Zion National Park, it is possible to arrange for a hunt with dogs within the boundaries of the park; not in the land owned by the National Park Service of course, but how do you stop a pack of dogs in that difficult country?

The wolf also ranges widely. It has been pushed back to the north where it is constantly harried, and to the south in Mexico where measures are less systematically efficient. A most interesting group of timber wolves from Canada exists in Isle Royale National Park and animal ecologists