

Where I live in northern New Mexico, bands of pinion jays forage over the gravelly juniper-pinion foothills of the Sangre de Cristo Mountains. In constant search for food they are readily attracted to feeders which they ~~will~~ soon become accustomed to visiting on a regular ~~basis~~ ^{in the winter} ~~in the winter~~ ^{after} this ~~in the winter~~ ^{in the spring} 1976, following a winter away from home, I hung a feeder from a dwarf apple tree growing beside a small goldfish pond which is heated against freezing during the cold months. ~~The water is as great an attraction for birds as is the food.~~ Robins drink from and bathe in the pond all the year around together with finches and sparrows. ^{smaller birds} The ~~latter~~ quickly discovered the feeder and it was their bustling activities along with the splashing of the robins that caught the ever-alert eyes of the jays. ^{In the spring} Before long they will begin courting ~~activities~~, pairing, and nest building, and then these flocks will disappear only to return late in summer after the new generation of jays is fully fledged.

~~Their first appearance one cold spring morning, when there was still frost in the air and the buds of the fruit trees had scarcely begun to swell, shortly after sunrise was like an invading army;~~
~~They came first to the feeder this year~~
 (Their first appearance) one cold spring morning, before the buds on the fruit trees had begun to swell, shortly after sunrise when there was still frost in the air was like an invading army. They pre-empted every perch a bird could occupy on and around the apple tree. The smaller birds vanished; only three or four intrepid robins were able to hold their own on the far side of the pool against the hoard of jays. The tree was loaded with dark gray-blue birds; they swarmed over the feeder, pushing and shoving and pecking at one another each intent on holding his place, and on the ground other jays crowded shoulder to shoulder to gobble up the seeds that rained down, spilled by the greedy ones above.

Now, on early spring mornings in the northern New Mexico mountains when frost still edges the air and the buds on the fruit trees have scarcely begun to swell, bands of pinion jays come to a feeder on my terrace. Soon they will start their courting, pairing, and nest building, and then they will disappear. When the flocks return in late summer, the new generation of jays will be fully fledged.

This spring, after a winter away from home, I hung the feeder from a dwarf apple tree growing beside a small goldfish pond which is heated against freezing during the cold months. Robins drink from and bathe in the pond all the year around together with finches and sparrows.

When frost still edged the air and the buds on the fruit trees had scarcely begun to swell, ^{arrived} shortly after sunrise one morning, the jays appeared like an invading army. They took every place a bird could occupy on and around the tree. The finches and sparrows vanished; only three or four intrepid robins held their own against the hoard of jays on the far side of the pool. ~~The tree was loaded with~~ Dark gray-blue jays; ~~they~~ swarmed over the feeder, pushing and shoving and pecking at one another, each intent on holding his place; on the ground other jays crowded one another shoulder to shoulder gobbling the seeds that rained down, spilled by the greedy birds above.

At the feeder and on the surrounding branches a continuous change took place between the surfeited birds and the unsatisfied ones ^{frustrated by a place} ~~insisting on a share~~. Amid a cacophony of expostulatory mewings, cluckings, and chattering, those holding favorable perches

their comrades' fought ^{the} attempts of their comrades to displace them. ^{Back to 64} Against the recently risen sun, the flashing wings of fluttering birds, of birds planing in for a landing and birds taking off, filled the apple tree with ~~a~~ scintillations of light from translucent feathers washed of all colors

As I watched this incredible display of aerial agility, I thought how wonderful are birds, each species, from the albatross to the hummingbird, so perfectly adapted ^{to its need} according to its needs. Unlike our clumsy mechanical inventions they seldom meet with accidents. Only when confronted by the structures and traps and poisons of men do they suffer mishap, ^{for} in the course of evolution they have adapted to most possible combinations of environments. There ~~are the~~ ^{are} frigate birds at home almost exclusively on the wing; ~~there are the~~ petrels who divide their time between air and water with only minimal use of land; ~~there are the~~ oilbirds who live in the perpetual darkness of caves from which they emerge only at night; ~~there are the~~ ^{are} gallinaceous birds, ^{who} live in marshes, ^{and} for whom flight seems to have become ^{an uneasy} a great effort as it ~~has~~ ^{has} for the roadrunner, a ground inhabiting cuckoo; ~~there are the~~ penguins who have abandoned flight in the atmosphere for what can best be described as flight in the sea; and there are the odd flightless species, such as the ostrich and the kiwi, who live exclusively on land.

In the flow of species evolution, birds have adapted to innumerable habitats and ecological niches. Given enough time, if they survive human interference, they ~~presumably~~ will continue to

adjust to conditions different from and more adverse than any they have yet been able to accept. Consider as examples of faunal plasticity the great class of fishes to which belong types that grow lungs, climb trees, and fly, albeit for no great distance as yet; and consider the mammalian species--the cetaceans--that have returned to the sea, abandoning all dependence on land. Is it not reasonable to expect that certain families of birds, ^{--such as grebes and penguins--} may become viviparous, incubating their eggs internally and thus be able to assume an entirely aquatic mode of life?

(not ended)