assertion, which we muſt remove. It is ſaid, Why do not rapacious fiſh, and aquatic quadrupeds and birds, devour theſe ſwallows ? The anſwer is obvious, ſwallows chooſe only ſuch places in the water for their winter retreat as are near reeds and ruſhes; ſo that sinking down there between them and their roots, they are by them ſecured againſt the rapaciouſneſs of their enemies. But others object, Why are not theſe birds caught in ſuch freſh waters as are continually haraſſed by nets ? I believe the ſame anſwer which has been made to the firſt objection will ſerve for this likewise. Fiſhermen take care to keep off with their nets from places filled with reeds and ruſhes, for fear of entangling and tearing their net ; and thus the ſituation of ſwallows under water, is the reaſon that they are ſeldom diſturbed in their silent winter retreats. What confirms this opinion ſtill more is, that ſwallows were never caught in Pruſſia according to the above-mentioned affidavits, but with thoſe parts of the net which passed near to the reeds and ruſhes ; and ſome­times the ſwallows were yet faſtened with their feet to a reed, when they were drawn up by the net. As to the ar­gument taken from their being to long under water with­out corruption, I believe there is a real difference between animals ſuffocated in water and animals being torpid there­in. We have examples of things being a long time un­der water ; to which we may add the intenſe cold of these northern regions, which preſerves them. Who would have thought that ſnails and polypes might be dissected, and could reproduce the parts ſevered from their bodies, if it was not a fact ? Natural hiſtory ought to be ſtudied as a collection of facts, not as the hiſtory of our guesses or opi­nions. Nature varies in an infinite manner ; and Providence has diverſified the inſtinct of animals and their economy, and adapted it to the various ſeaſons and climates.”

With Mr Kahn’s concluding obſervations we heartily concur. Natural hiſtory ought to be ſtudied as a collection of facts ; and it was from this very notion that we have ſtated the above mentioned opinions ſo fully, and brought together the tacts which the best advocates for each opinion have judged moſt proper for ſupporting them. We are ſenſible of the great improbability of the third opinion, and know that many arguments have been uſed to prove its abſurdity : ſuch as theſe, The ſwallow is lighter than water, and therefore cannot sink ; if it moults at all, it muſt moult under water during its torpid ſtate, which is very improba­ble ; there is no inſtance of land animals living ſo long under water without reſpiration. Many other arguments of the ſame sort have been advanced, and certainly afford a ſhort way of deciding the queſtion ; but unleſs they were sufficient to prove the immerſion of ſwallows a phyſical impoſſibility, they are of no force when oppoſed to the evi­dence oſ testimony, it there be no cauſe to ſuspect the witneſſes of inaccuracy or design. The true way to refute ſuch an opinion is by accurate obſervation and experiment. We have not heard of any accurate inquiries being made by philoſophers in thoſe northern countries where ſwallows are laid to pass the winter under water. The count de Buffon, indeed, ſhut up ſome ſwallows in an ice-houſe by way of ex­periment, which died in a few days ; but as he does not tell us what precautions he took to make the experiment ſucceed, it is not intitled to any attention.

Mr John Hunter made a very judicious experiment on the banks of the Thames, which is deſcribed by a correſpondent in the Gentleman’s Magazine, who aſſerts that he had it from Mr Hunter himſelf.

One year in the month of September, he prepared a room, with every accommodation and convenience which he could contrive, to ſerve as a dormitory for ſwallows, if they were diſpoſed to ſleep in winter. He placed in the centre a large tub of water with twigs and reeds, &c. which reached to the bottom. In the corners of the room he contrived ar­tificial caverns and holes, into which they might retire ; and he laid on the floor, or ſuſpended in the air, different lengths of old wooden pipes, which had formerly been employed in conveying water through the ſtreets, &c.

When the receptacle was rendered as complete as poſſible, he then engaged some watermen to take by night a large quantity of the ſwallows that hang upon the reeds in the Thames about the time of their departure. They brought him, in a hamper, a conſiderable number ; and had ſo nice­ly hit the time of their capture, that on the very day fol­lowing there were none to be ſeen.

He put the ſwallows into the room ſo prepared, where they continued to fly about, and occaſionally perch on the twigs, &c. But not one ever retired into the water, the caverns, holes, or wooden pipes, or ſhewed the leaſt diſposition to grow torpid, &c. In this ſituation he let them re­main till they all died but one. This, appearing to retain ſome vigour, was ſet at liberty ; when it mounted out of sight, and flew away. All the birds lay dead ſcattered about the room ; but not one was found aſleep or torpid, or had, if the correſpondent remembers, ſo much as crept into any of the receptacles he had ſo provided.

This experiment was ingenious, and certainly does render the doctrine of immerſion much more improbable ; but it is not decisive ; for it may ſtill be urged by the advocates for that doctrine, as Mr Kalm has done, that it may only be in the colder countries where ſwallows retire into the water. We formerly ſaid that none of the three opinions are ſupported by ſuch evidence as to ſatisfy the mind com­pletely. Opinions which reſpect events which happen every year ought to be confirmed by a great number of obſervations, and not by a few inſtances diveſted of almoſt all their concomitant circumſtances. Can no better proofs be brought to prove the migration of ſwallows than thoſe of Adanſon and Sir Charles Wager, or the circumſtances mentioned by Mr White and Mr Laſkey reſpecting their diſappearing ? We ought not merely to know that ſome ſwallows have taken a ſoutherly flight in autumn, that ſome have been ſound at a great distance from land in the ſpring, or in harveſt ; but we ought to know to what countries they actual­ly retire. Before, we can reſt ſatisfied, too, that it is a ge­neral fact that swallows remain in a torpid ſtate during winter, either in caverns or in the bottom of lakes, &c. we muſt have more proofs ; we muſt know what species of ſwal­lows they are laid to be, in what countries this event takes place, and ſeveral other circumſtances of the same kind.

We cannot help being of opinion that much remains to be done in order properly to ascertain what becomes of the ſwallows in Europe during winter. It would be necessary, in the firſt place, to know accurately what are the countries in which ſwallows are found. 2. Do they remain visible the whole year ? or, if they diſappear, at what ſeaſon does this happen, and when do they appear again ? 3. Do they ever appear while a ſtrong north wind blows, or do they only come in great numbers with a ſouth wind ? We will endea­vour to anſwer ſome of theſe queſtions in part ; but muſt re­gret, that all the information on this ſubject which we have been able to cull from the beſt writers in natural hiſtory is very ſcanty ; and we merely give it by way of ſpecimen, hoping that future obſervations will ſoon render it more complete.

There are five ſpecies which viſit Britain during the ſummer months ; the common or chimney swallow, the mar­tin, sand martin, ſwitt, and goat-sucker. The chimney ſwallow frequents almoſt every part of the old continent ; being known (ſays Dr Latham) from Norway to the Cape