of Good Hope on the one fide, and from Karrjtſchetka to India and japan on the other. It is alſo found in all parts of North America, and in ſeveralof the Weft Indian Iſlands. In Europe it diſappears during the winter months. It ap­pears generally a little after the vernal equinox ; but rather earlier in the ſouthern, and later in the northern latitudes. It adheres to the uſual ſeaſons with much regularity ; for though the months of February and^iarch ſhould be un­commonly mild, and April and May remarkably cold, it never deviates from its ordinary time. In the cold ſpring of '740 ſome appeared in France before the infects on which they feed had become numerous enough to iupport them, and great numbers died f. In the mild and even warm ſpring of 1 7 74 they appeared no earlier than uſual. They remain in ſome warm countries the whole year. Kol­ben affures us that this is the cafe at the Cape of Good Hope ; but (he lays) they are more numerous in winter. Some birds of this ſpecies live, during winter, even in Eu­rope ; for example, on the coaſt of Genoa, where they ſpend the ni;?ht in the open country on the orange ſhrubs.

2. The *martins* are alſo widely diffuſed through the old con­tinent ; but the countries where they reſide or viſit have not been marked by naturaliſts with much attention. 3. The *fand martins* are found in every part of Europe, and frequently ſpend the winter in Malta J. Two birds of this ſpecies were ſeen in Perigord in France, on the 27th Decem­ber 1775, when there was a ſoutherly wind, attended with a little rain ∣∣. 4. The *ſvaiſt* viſits the whole continent of

Europe ; has alſo been obſerved at the Cape of Good Hope, and in Carolina in North America. ç. The *goatſuckers* are not very common birds, yet are widely ſcattered They are found in every country between Sweden and Africa : they are found alſo in India. In April the ſouth-weſt wind brings them to Malta, and in autumn they repaſs in great numbers.

Mr Markwick of Catsfield, near Battle in Suffex, has drawn up an accurate table, expreſſing the day of the month on which the birds, commonly called *migratory,* appeared in ſpring, and diſappeared in autumn, for 16 years, from 1768 to 1783 incluſive. The obſervations were made at Catsſield. From this table we ſhall extract the dates for five years, and add the very few obſervations which we have been able to collect reſpecting the time when the ſwallow appears and diſappears in other countries.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 1779∙ | |  | 17Sr. | |
|  | *l'irfifeen. Laß feen.* | |  | *Lirβ feen. Laßſeen.* | |
| Chim. SwaL | Ap. 14. | O<fl. 29. | Sand Mart. | Ap. 26. | Sep. I. |
| Martins | 14. | 1J∙ | Swift | May 12. | I. |
| Sand Mart. | May 7. |  |  | 1782. |  |
| Swift | 9∙ |  | Chim. Swal. | Ap. 22. | Sep. I. |
|  | 17 80. |  | Martins | 26. | Nov. 2. |
| China. Swal |  | Nov. 3. | Sand Mart. | May 13. | Aug. 28. |
| Martins | Ap. 29. | 3∙ | Swift | iS. | 28. |
| Sand Mart. | 8. | Sep. S. |  | 1783. |  |
| Swift | May 6. | 8. | Chim. Swal. | Ap. 13, | Nov. 6. |
|  | 1781. |  | Martins | May I. | 6. |
| Chim. Swal. | Ap. 8. | O<S. 15, | Sand Mart. | July 25. | Sep. I. |
| **Mai tins** | May 12. | Sep. 7. | Swift | May 13. | Nov. 6. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| China. Swal. | | Swifts.  *Appear* | Martin». *about* | S. Mart. |
| In Burenndy + |  |  | Ap. 9. | Ap. 12. |
| In Selborne, Hampiħire ∣ | Ap. 4. | Λp. 24. | Ap. 30. |  |
| In South Zele, Devonflιire f | \*5∙ | May i. | May 15. |  |
| In Blackburn, L,ancaflιire ∣ | aS>∙ | Λp∙ 28. |  |  |
| In Upſal in Sweden § |  |  | May 9. |  |

Were tables of the ſame kind made in every different country, particularly within the torrid zone, it would be eaſy to determine the queſtion which we have been conſi- dering. To many, perhaps, it may not appear a matter of ſuch importance as to be worth the labour. We acknow­ledge it to be rather a curious than an important inquiry ; yet it is one which muſt be highly gratifying to every mind that can admire the wiſdom of the Great Architect of nature. The inſtinct of the ſwallow is indeed wonder­ful : it appears among us juſt at the time wſhen infects be­come numerous ; and it continues with us during the hot weather, in order to prevent them ſrom multiplying too much. It diſappears when theſe infects are no longer troubleſomc. It is never found in folitude ; it is the friend of man, and always takes up its reſidence with us, that it may protect our houſes and our ſtreets ſrom being annoy­ed with ſwarms of flies.

*SwHLLOw-Wort,* in botany. See Asclepias.

SWAMMERDAM (John), a celebrated and learned natural philpſopher, was the ſon of John James Swammer­dam, an apothecary and famous naturaliſt of Amſterdam, and was born in 1637. His father intended him for the church, and with this view had him inſtructed in Latin and Greek ; but he, thinking himſelf unequal to ſo important a taſk, prevailed with his father to conſent to his applying himſelf to phyſic. As he was kept at home till he ſhould be properly qualified to engage in that ſtudy, he was fre­quently employed in cleaning his father’s curioſities, and putting every thing in its proper place. This inſpired our author with an early taſte for natural hiſtory ; ſo that, not content with the ſurvey of the curioſities his father had pur- chaſed, he ſoon began to make a collection of his own, which he compared with the accounts given of them by the beſt writers. When grown up, he ſeriouſly attended to his anatomical and medical ſtudies ; yet ſpent part of the day and the night in diſcovering, catching, and examining the flying infects proper to thole times, not only in the province , of Holland, but in thoſe of Guelderland and Utrecht.—- Thus initiated in natural hiſtory, he went to the univerſity of Leyden in 165Ί ; and in 1663 was admittcd a candidate of phyſic in that univerſity. His attention being now en­gaged by anatomy, he began to conſider how the parts of the body, prepared by diſſection, could be preſerved, and kept in confiant order for anatomical demonſtration ; and herein he lucceeded, as he had done before in his nice con­trivances for diſſecting and managing the minuteſt infects. Our author afterwards made a journey into France, where he ſpent ſome time at Saumur, and wſhere he became acquaint­ed with ſeveral learned men. In 1667 he returned to Ley­den, and took his degree of Doctor of Phyſic. The next year the grand duke of Tuſeany being in Holland in order to fee the curioſities of the country, came to view thoſe of our author and his father ; and on this occalion Swammer­dam made ſome anatomical diſſections of infects in the pre- ſence of that prince, who was ſtruck with admiration at our author’s great ſkill in managing them, eſpecially at his pro­ving that the future butterfly lay with all its parts neatly folded up in a caterpillar, tty actually removing the integu­ments that covered the former, and extricating and exhibit­ing all its parts, however minute, with incredible ingenuity, by means of inſtruments of inconceivable ſineneſs. On this occafion the duke offered our author 12,000 florins for his ſhare of the collection, on condition of his removing them himſelf into Tuſcany, and coming to live at the court of Florence ; but Swammerdam, who hated a court life, declined his highnefs’s propoſal. Tn 1663, he publiſh- ed a General Hiſtory of Infects. About this time, his fa­ther began to take offence at his inconſiderately neglecting the practice of phyſic, which might have ſupported him in affluence ; and would neither ſupply him with money nor clothes. This reduced him to ſome. difficulties. In 1675 he publiſhed his Hiſtory of the Ephemeras ; and his father dy­ing the ſame year, left him a fortune ſufficient for his ſup-