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A Review of the English and Scientific Nomenclature of Cave Swiftlets *(Aerodramus)*

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English names for the world's birds have long been considered unimportant by taxonomists. Scientific nomenclature, which is standardized for all languages and which is based on a precise set of rules, is often considered sufficient for all purposes. In North America, however, the American Ornithologists' Union has long codified English names as well. This standardization of English names has served several useful functions, not the least of which is nomenclatural stability. This statement may surprise those who conceive of scientific nomenclature as standardized and stable. Nothing could be further from the truth. Because scientific names function not only as labels but also as indicators of relationships, they must change when new information forces a rethinking of the classification. English names (or names in other modern languages) need not be changed every time a species is transferred to a new genus, or when two or more genera are combined. Thus the Fork-tailed Flycatcher of the 1957 AOU Check-list was *Muscivora tyrannus,* but in the 1983 edition became *Tyrannus savana.* Rules of zoological nomenclature required such a change when the genus *Muscivora* was merged with *Tyrannus,* because the latter genus already had a species *T. tyrannus* whose name antedated that of the Fork-tailed Flycatcher. The Fork-tailed Flycatcher then assumed its second-oldest name and became *T. savana.* In this case, the English name was more stable, and indeed provides the only clue most non-professionals would have that *M. tyrannus* and *T. savana* are one and the same. Vernacular names, once standardized for a given language, would always be more stable than scientific names because they need reflect only species limits, not generic allocations. (I disagree with those who suggest we adopt distinctive vernacular group-names for genera or groups of genera. If we do that, we will defeat the whole purpose of standardization and might as well use scientific nomenclature.) Such names should function mainly as labels. When they are informative or interesting, so much the better, but that should not be considered their primary role. For example, a small green Hawaiian honeycreeper has been called the *'amakihi* since the earliest days of ornithological exploration in those islands. However, it has carried at various times the scientific names *Certhia virens, Melithreptus virens, Nectarinia flava, Drepanis flava, Himatione virens, Chlorodrepanis virens, Loxops virens,* and now *Hemignathus virens!* The only alteration ever made in the English name (which is based on the Hawaiian) has been the recent addition of the word "Common," to distinguish this species from the Greater 'Amakihi *(H. sagittirostris)* and the Lesser 'Amakihi or 'Anianiau *(H. parvus).* The use of the taxonomically noncommittal Hawaiian name as a label, nothing more, has had obvious advantages in English-language publications over the years. In fact, anyone wishing to read the older literature on Hawaiian birds is forced to learn the Hawaiian names in order to make any sense of it at all. This is certainly an extreme example, but illustrates the value of standardizing names of birds in modern languages.

Speakers of some other languages (e.g. French, Spanish, German) have begun the task of standardizing names for the world's birds in those tongues. The task for English is much more difficult, but also more important because so much of the popular and technical literature on birds is in English. Many pitfalls await the intrepid lexicographer willing to journey into the realm of English names for birds, as the example that is the main subject of this paper will demonstrate. I hope this paper will serve to show that even the most complex nomenclatural problems can be worked out with a knowledge of the birds and thorough analysis of all the pertinent literature. Regionalisms can be reconciled, ambiguities can be eliminated, and a useful list of English names can be adopted for even the most perplexing groups. Unfortunately, this paper also shows that none of the various English world bird check-lists currently in print have adequately researched the problems. Probably no single author or group of authors is equal to the task on a worldwide basis, so the best approach may be for individuals to tackle small taxonomic groups one at a time, as I have done here.

In the course of selecting English names to be used in a forthcoming field guide to Pacific birds (Pratt et al., in press), I became acutely aware of a particularly vexing nomenclatural problem that involves the small echolocating cave swiftlets found from the Himalayas to Polynesia. Both the scientific and English nomenclature of these birds is in chaos. For example, the Edible-

Island Swiftlet in nesting tunnel, North Halawa Valley, Oahu, 1978.
Photo by Greg Vaughn

nest Swiftlet has 3 different scientific names in use; the name Gray Swiftlet is applied to 4 different species by various current authors; and *Aerodramus vanikorensis,* a species widespread in Micronesia and Melanesia and introduced to Hawaii, has 6 different English names in various publications. No two English world check-lists (Clements 1981; Edwards 1982; Gruson 1976; Howard and Moore 1980; Morony et al. 1975; Walters 1980) agree on the classification or English names of swiftlets. This review of the literature is an attempt to bring some order to this confusing situation and to propose a single English name for each of the currently recognized swiftlet species.

Cave swiftlets are placed either in the genus *Collocalia* Gray 1840 or the smaller genus *Aerodramus* Oberholser 1906. Brooke (1972) advocated dividing *Collocalia* into three genera, because of differences in nesting behavior and the ability to echolocate. His classification leaves *Collocalia* with only 3 species *(esculenta, marginata,* and *troglodytes),* places the Giant Swiftlet *(Hydrochous gigas)* in a monotypic genus, and puts all other cave swiftlets in *Aerodramus.* Most swiftlet specialists have followed Brooke (1972), but among authors of general check-lists, only Clements (1981) and Edwards (1982) have done so. Morony et al. (1975) list the subdivisions as subgenera as Brooke (1970) had first proposed. This paper deals only with *Aerodramus* as delineated by Brooke (1972). Note that *Aerodramus* is masculine, whereas *Collocalia* is feminine, and species epithets must be adjusted acordingly.

Table 1 lists all the taxa of *Aerodramus* that have been given species rank by any recent author, with the English names used for them. I have used the American spelling "gray" for that color, but English-language publications outside North America use the British form "grey." The two are interchangeable. Six forms *(elaphrus, hirundinaceus, nuditarsus, ocistus, orientalis,* and *Whiteheadi)* have only one English name in current use, and are thus unambiguous. Unfortunately, most of these taxa are not considered full species in recent revisions. Many ambiguities have resulted from the lumping of species when the combined taxon took the English name of one component but the scientific name (under rules of priority) of the other. For example, when *A. lowi* was recognized as conspecific with *A. maximus,* several authors transferred the name Low's Swiftlet to *A. maximus,* previously (and still in most works) known as the Black-nest Swiftlet. Such cases that involve only 2 forms are relatively easily resolved, as are those in which essentially the same name is written in different ways (e.g. Carolines vs. Caroline Islands Swiftlet, Tahiti vs. Tahitian Swiftlet), where the choice is largely a matter of style. In several cases, however, the nomenclatural history is so convoluted that it must be examined in detail before any recommendation can be made as to which English name is the best.

The classification I follow is that of Medway and Pye (1977) as supplemented by Holyoak and Thibault (1978). These authors offer the only modern revision or check-list of this genus that is based on primary research. Their species limits are based mainly on the kinds of nests constructed and the birds' ability to echolocate, the same criteria used by Brooke (1972) at the generic level. As more has been learned about these matters, swiftlet taxonomy has changed progressively, and not all cases are settled (Medway 1966, 1975; Somadikarta 1967; Procter 1972; Holyoak and Thibault 1978).

In choosing English names I have followed the recommendations of the Committee on Classification and Nomenclature of the American Ornithologists' Union (AOU 1983).

Island Swiftlet nest and egg, North Halawa Valley, Oahu, 1978. *Photo by Greg Vaughn*

The most important of these guidelines in this context are: a) that well-known names for well-established species should be retained wherever possible; b) that modifiers should be used for group-names applied to more than one species; and c) that new names must be provided for species formed by consolidation of two or more previously recognized species if none of the previous names are appropriate to the enlarged species.

Several English names (Table 2) have been so overused in swiftlet nomenclature that they are now hopelessly ambiguous and should be avoided altogether. Such is certainly the case for "Gray Swiftlet" (a meaningless name at best because all swiftlets are more or less gray). It has been applied by various authors to 4 different taxa, one of which *(A. vanikorensis)* is now an amalgam of at least 3 formerly recognized species and parts of at least 2 others. I have rejected other names for a variety of reasons, but wherever possible I have chosen the most often used name. Only two entirely new names, Indian Ocean Swiftlet for *A. francicus* and Island Swiftlet for *A. vanikorensis,* are proposed herein.

The following accounts, in alphabetical order, discuss the current taxonomic status and name choices for the taxa listed in Table 1.

Aerodramus brevirostris. Himalayan Swiftlet.—Ripley (1961) called this species the "Indian Edible-nest Swiftlet," a name usually applied to *A. unicolor.* He considered *unicolor* a race of *A. fuciphaga* ("Malaysian Edible-nest Swiftlet"), so his use of this English name for *brevirostris* is curious. Fleming et al. (1979) further cloud the issue by calling *A. brevirostris* simply the "Edible-nest Swift." The name Himalayan Swiftlet has not been used for any other taxon, and so remains suitable for this species.

Aerodramus elaphrus. Seychelles Swiftlet.—This form is endemic to the Seychelles, and is variously considered a species or a subspecies of *A. francicus.* The above name is appropriate if it is a species, but a consensus appears to be forming that *elaphrus* and *francicus* are conspecific (see Procter 1972; Penny 1974; Barre and Barau 1982). If they are, a new all-inclusive name should be selected for the combined species (see *A. francicus).*

TABLE 1.
SCIENTIFIC AND ENGLISH NAMES OF *AERODRAMUS* SWIFTLETS FROM RECENT LITERATURE

Taxon	English Name	Sources (numbers from Literature Cited)
brevirostris	Himalayan	most sources
	Indian Edible-nest	37
	Edible-nest Swift	18
elaphrus	Seychelles Cave	25
	Seychelles	17, 28, 42
francicus	Gray-rumped	20, 25, 28, 42
	Mauritius	17
	Mascarene	11, 30
	Seychelles Cave (includes *elaphus)*	33
fuciphagus	Edible-nest (includes *inexpectatus)*	most sources
	Malaysian Edible-nest (includes *unicolor*)	37
	Gray-rumped	39
	White-nest	1
	Thunberg's	20, 25, 42, 43
	Hume's	19
hirundinaceus	Mountain	all
inexpectatus	Edible-nest	most sources
	Gray-rumped	37
inquietus	Caroline Islands	3
	Caroline	17, 42
	Carolines	11, 20, 25, 32
leucophaeus	Tahitian	20, 25
	Tahiti (includes *sawtelli* and *ocistus)*	16, 17
	Polynesian	41
	Marquesas (includes *ocistus)*	11
lowi	Low's	13, 20
	Robinson's	19
maximus	Black-nest	11, 26, 39
	Low's (includes *lowi?)*	17
	Lowe's (includes *lowi)*	25
	Indomalayan	1
nuditarsus	Bare-legged	17
	Schrader Mountain	25
	Naked-legged	42
ocistus	Marquesan	10, 25
orientalis	Guadalcanal	17, 25
papuensis	Three-toed	17, 30, 40
	Isenburg River	25
salangana	Mossy-nest	39
	Mossy	25
	Thunberg's	42
	Sunda	17
sawtelli	Sawtell's	17, 42
	Atiu	23
	Cook Islands	17, 25
spodiopygius	White-rumped	most sources
	Gray	34, 38
	Gray-rumped	34
	Pacific White-rumped	28, 42

(continued)

(Table 1, continued)

terraereginae	Gray	12
unicolor	Indian Edible-nest	21, 25, 30, 42
	Indian	11, 17
vanikorensis	Vanikoro	27, 32
	Gray	2, 9, 15
	Uniform	12, 17, 20, 21, 25, 34, 38
	Lowland	5, 17, 42
	Mossy-nest	11, 30
	Guam Cave	6
vestitus	Gray	13, 14, 17
	Brown-rumped	19, 20, 39
whiteheadi	Whitehead's	all sources

Aerodramus francicus. Mascarene Swiftlet or Indian Ocean Swiftlet.—The former name should be used if *elaphrus* of the Seychelles is considered a separate species; the latter is my suggestion for an alternative if *elaphrus* and this form are combined. The form *francicus* is endemic to the Mascarene Islands of Reunion and Mauritius. The name Gray-rumped Swiftlet came into use for *A. francicus* when the Indian Ocean forms were lumped with South-east Asian and East Indian forms (see *A. fuciphagus),* but Medway (1966) used that name for the Mascarene birds only—a case of one species stealing the English name of another by first being lumped and then split! In any case, "Gray-rumped" should not be used for *A. francicus.*

Aerodramus fuciphagus. Edible-nest Swiftlet.—These birds are so named because their nests are made almost entirely of hardened saliva, and are used as a base for bird's-nest soup, an Oriental delicacy. These are "white" nests as opposed to the "black" nests of other swiftlets that have much plant material and feathers mixed with the saliva. Long known as *Collocalia inexpectata,* this species included forms from the Andaman Islands east to western Micronesia *(bartschi* of the Marianas and *pelewensis* of Palau). Some authors have treated this complex under the name *francicus* by including in it the Mascarene Swiftlet. Most authors since Medway (1966) have included the former Thunberg's or Hume's Swiftlet *(fuciphagus* sensu stricto), whose name has priority over *inexpectata* but not over *francicus.* Howard and Moore (1980) muddied the waters by lumping *francicus* with *inexpectata,* but leaving *fuciphagus* separate. The basis for such a classification is not apparent. Medway (1966; 1975) transferred the two

TABLE 2.
AMBIGUOUS ENGLISH NAMES OF SWIFTLETS *(AERODRAMUS)*

Name	Taxon	Sources
Gray	*vanikorensis*	2, 9, 15, 30 (alternate)
	spodiopygius	2 (alternate), 34, 38
	vestitus	13, 14, 17
	terraereginae	12
Gray-rumped	*francicus* (sensu stricto)	28
	francicus (including *inexpectatus)*	25
	francicus (including *inexpectatus* in part)	20, 42
	fuciphagus (including *inexpectatus)*	1
	fuciphagus (not including *inexpectatus)*	39
	inexpectatus	37
	spodiopygius	34 (alternate)
Edible-nest	*fuciphagus* (including *inexpectatus)*	most recent sources
	inexpectatus	most older sources
	brevirostris	18
Indian Edible-nest	*unicolor*	11, 25, 30
	fuciphagus (including *unicolor)*	22
	brevirostris	37
Mossy-nest	*salangana*	39
	vanikorensis (including *salangana)*	30
Low's	*lowi*	13, 20
	maximus (including *lowi)*	17, 25
Thunberg's	*salangana*	42
	fuciphagus	17, 20, 25, 43

Micronesian forms, which do not build "white" nests, to *A. vanikorensis*. He also included the East Indian form *vestitus* in *A. fuciphagus*.

Aerodramus hirundinaceus. Mountain Swiftlet.—This endemic New Guinea species presents no nomenclatural problems, but see the discussion of its lowland counterpart *A. vanikorensis*.

Aerodramus inexpectatus.—This older name for the Edible-nest Swiftlet (which see) still appears occasionally in the literature. Ripley (1961) used the name "Gray-rumped Swiftlet" for it, a name that is now virtually meaningless.

Aerodramus inquietus. Caroline Islands Swiftlet.—This name was in use for a group of 3 subspecies on Truk, Pohnpei, and Kosrae in the Carolines, but Medway (1975) and Medway and Pye (1977) consider them to belong to *A. vanikorensis*.

Aerodramus leucophaeus. Tahiti Swiftlet or Polynesian Swiftlet.—The second name should only be used if the other two swiftlets of southeastern Polynesia *(ocistus* and *sawtelli)* are lumped with this one.

Aerodramus lowi. This group of subspecies is now regarded by virtually all authors as belonging to *A. maximus*.

Aerodramus maximus. Black-nest Swiftlet.—This name is appropriate to contrast this species with the "white-nest" *A. fuciphagus,* with which it is broadly sympatric. The name Low's Swiftlet, brought in when *lowi* and its relatives were added to this species, should be dropped.

Aerodramus nuditarsus. Bare-legged Swiftlet.—This species was established by Somadikarta (1967) who proposed no English name for it. B. King (in litt.) suggests the more accurate and euphonious name Bare-footed Swiftlet. Medway and Pye (1977) consider this form a subspecies of *A. whiteheadi*.

Aerodramus ocistus. Marquesas Swiftlet.—I prefer this construction to "Marquesan" because it parallels other such island names. (The Marquesas are never called the "Marquesan Islands.")

Aerodramus orientalis. Guadalcanal Swiftlet.—Like *nuditarsus,* this species was delineated by Somadikarta (1967) without an English name. Even though this bird probably also lives on New Ireland, the above name will do if this is indeed a distinct species. Medway and Pye (1977) consider it a race of *A. whiteheadi*.

Aerodramus papuensis. Three-toed Swiftlet.—Somadikarta's (1967) name is particularly appropriate for this species, because it is the only *Aerodramus* with only 3 toes. Howard and Moore's (1980) name "Isenburg River Swiftlet" is much less suitable.

Aerodramus salangana. Mossy-nest Swiftlet.—This form is now usually placed in the *A. vanikorensis* complex. The above name was not widely used, but Medway and Pye (1977) suggested it as the name for *vanikorensis* when they lumped *salangana* with it. Such a course can only cause confusion.

Aerodramus sawtelli. Atiu Swiftlet.—Of uncertain status, this form is endemic to Atiu in the Cook Islands (Holyoak and Thibault 1978). It can equally well be considered a race of *A. leucophaeus*.

Aerodramus spodiopygius. White-rumped Swiftlet.—The taxonomy of this species is relatively straightforward except that some authors separate the Australian form *terraereginae* from it (Condon 1975). In Australia, "Gray Swiftlet" is in use for this species (or for *terraereginae),* but that name has been so overused as to be meaningless in an international context.

Aerodramus terraereginae.—Only Condon (1975) among recent authors recognizes this form as distinct from *A. spodiopygius*.

Aerodramus unicolor. Indian Swiftlet.—This shorter English name seems suitable for this species, and avoids the problem of having to add a second modifier to the English name for *A. fuciphagus*. "Indian Edible-nest Swiftlet" should be dropped also because it has been applied previously to another species by Ripley (1961), who also lumped *unicolor* with *fuciphagus*.

Aerodramus vanikorensis. Island Swiftlet.—This species is widespread in the southwestern Pacific region. The nucleus *vanikorensis* originally included only forms distributed from Celebes eastward throughout Melanesia. Medway (1966) transferred the Micronesian *bartschi* and *pelewensis* and the Philippine form *amelis* from the edible-next complex to this one, and the English name "Gray Swiftlet" came into use for the enlarged taxon. Medway (1975) added *salangana* and *inquietus* to the complex. In an effort to keep up with this ever-expanding species, various authors have used a variety of English names (Table 1), many of which are now inappropriate for various reasons. The original name Vanikoro Swiftlet was resurrected by Owen (1977), but his apellation now seems too provincial. The use of "Mossy-nest Swiftlet," as proposed by Medway and Pye (1977), might now be appropriate but will inevitably lead to confusion because that name was once restricted to *A. salangana*. "Uniform Swiftlet," used primarily by Australian ornithologists, is inappropriate now that several pale-rumped forms have been added to the complex. "Lowland Swiftlet" is suitable in New Guinea to contrast this species with the Mountain Swiftlet, but is a nonsense name in other parts of the species' range. "Gray Swiftlet" suffers from overuse and resultant ambiguity: it is used for *A. spodiopygius* (or *A. terraereginae)* in Australia; it was formerly used for *Collocalia vestita* (now a race of *A. fuciphagus)* in the Malaysian region (Delacour 1947); and in the Philippines it has been used for both *C. vestita* (Delacour and Mayr 1946) and *C. vanikorensis* (duPont 1971; Bruce 1980). To avoid further confusion, "Gray Swiftlet" should be suppressed entirely. What is needed is a name appropriate to *A. vanikorensis* wherever it is found that will not cause confusion with some other presently or formerly recognized species. Berger (1981) was on the right track when he used "Guam Cave Swiftlet" for *A. v. bartschi*. But "Cave Swiftlet" would also be ambiguous because that combination is widely used as a group-name for the whole genus. One thing that characterizes *A. vanikorensis* as a whole is its presence almost exclusively on islands. Thus I propose the above name as a distinctive, informative, unambiguous, and easily remembered English name for this species.

Aerodramus vestitus. Brown-rumped Swiftlet.—The suggestion of an English name for this form, now lumped with *A. fuciphagus,* is not entirely academic, because evidence exists that the two may be sympatric on Borneo (Medway 1966). In any case, the use of "Gray Swiftlet" for this form should be avoided.

Aerodramus whiteheadi. Whitehead's Swiftlet.—This form presents no nomenclatural problems, but its taxonomy has had a complex history. Once considered to be restricted to the Philippines, it now includes 2 Melanesian forms *(orientalis* and *nuditarsus)*. All 3 were included in *A. brevirostris* by Medway (1966).

Table 3 lists the species of cave swiftlets as currently understood, with appropriate English names and a brief account of range. Table 3 can be regarded as a summary of this paper's conclusions.

TABLE 3.
CURRENTLY RECOGNIZED SPECIES OF *AERODRAMUS* SWIFTLETS WITH THEIR DISTRIBUTIONS

Species	English Name	Distribution
A. brevirostris	Himalayan Swiftlet	South-east Asia, Greater Sundas, Philippines
A. francicus	Indian Ocean Swiftlet	Mauritius, Reunion, Seychelles
A. fuciphagus	Edible-nest Swiftlet	South-east Asia, East Indies, Philippines
A. hirundinaceus	Mountain Swiftlet	New Guinea
A. leucophaeus	Tahiti Swiftlet	Tahiti, Moorea
A. maximus	Black-nest Swiftlet	Himalayas east to Greater Sundas, Philippines
A. ocistus	Marquesas Swiftlet	Marquesas
A. papuensis	Three-toed Swiftlet	New Guinea
A. sawtelli	Atiu Swiftlet	Atiu (Cook Islands)
A. spodiopygius	White-rumped Swiftlet	Moluccas, Australia, east to Samoa, Tonga
A. unicolor	Indian Swiftlet	Southern India, Sri Lanka
A. vanikorensis	Island Swiftlet	East Indies, Philippines, Micronesia, Melanesia
A. whiteheadi	Whitehead's Swiftlet	Philippines, New Guinea, Solomon Islands

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IS MANANA ISLAND NOW "RABBITLESS ISLAND?"

Manana Island off of windward Oahu is commonly refered to as "Rabbit Island." On several occasions I have heard people alluding to the island's outline as a source for this name, "You see, the nose points east towards Makapuu Point, and the rabbit's ears are laid back along its head there."

With a little bending of my imagination I, too, can envision the shape of the island as a rabbit's head. However, it comes as a surprise to many people that there actually are rabbits on Manana, and that that is the more obvious origin of the name Rabbit Island.

European rabbits *(Oryctolagus cuniculus)* were introduced to Manana at some time just prior to 1900. The rabbits are suspected to have destroyed some native plant species previously occurring on the island, though there are no botanical records from the island prior to that time, and it can not be doubted that their presence has continued to have a restrictive effect on the existing vegetation there.

It appears that there are no longer any rabbits surviving on Manana. Though one is hesitant to make such a finalized claim on this subject, my observations from Manana during the past three years leave little doubt in my mind that the rabbits are indeed gone.

During 1983, 1984, and 1985 I visited Manana regularly from May through September

Rabbit bones on Manana Island.

Photo by Jack Swensen

while engaged in seabird studies there. In 1983 I saw rabbits frequently and their droppings were evident throughout many parts of the island. In July, after a copious rain, the island greened up considerably as new grasses sprouted. During subsequent weeks one could easily count as many as ten rabbits feeding on the south side of the island and twice that number within the crater.

1984 was a very dry year and during five months of field work on Manana I only sighted one rabbit. It leapt out of a hole and was chased around a hillside by a raucous flock of Brown Noddies in flight.

That was the last rabbit that I've seen on Manana. During 1985, despite a summer profusion of plant growth resulting from heavy rains in May, I saw no rabbits and no rabbit droppings. If rabbits were still surviving on Manana in 1985, it seems likely that they would have been evident during these months of abundant green vegetation.

Manana's rabbits were reported to have had minimal interactions with the island's breeding seabirds. The types of plant species and their density on Manana largely dictate the suitability of the island for breeding of certain species of seabirds. As the rabbits directly affected the vegetation, their presence, or lack thereof is of consequence to the seabirds of Manana.

In 1985 a sprawling vine *(Merremia aegyptia)*, previously not reported on Manana, was growing in numerous patches on the south-facing slope of the island. In one five square meter area this plant grew dense enough to preclude the nesting of Sooty Terns which had previously used this area. Whether the sudden abundance of this plant is related to the disappearance of the rabbits is not known, but it serves as an example of the potential