JOHAN WARODELL (University of Sussex)

Beyond the Butterfly:

Three Hundred Animal Species in Nabokov's Fiction

"loud crickets engaged in clockwork competitive chirring"
—*Glory*

Vladimir Nabokov bequeathed his European collection of 4,300 butterfly specimens (representing 195 species) to the Lausanne cantonal library. The Museum of Cultural and Natural History, the American Museum of Natural History, the Cornell University Museum of Entomology and the Carnegie Museum in Pittsburgh hold the thousands of specimens he collected in North America. Nabokov also published eighteen papers on Lepidoptery in scientific journals; worked as curator of Lepidoptery at Harvard's Museum of Comparative Zoology; and named twelve valid species and genera. While there are multiple journal articles and four book-length studies that pin down the butterflies in Nabokov's fiction and life,[1] the larger fauna of Nabokov's fiction is comparatively unexplored. There are yet no answers to questions such as, "how many animal species are there in Nabokov's fiction?", "do these animals have any characteristics in common?", "what role does the fauna serve in Nabokov's narratives?"

How to read and understand animals in modern literature is of increasing importance: "the unignorabilty of ecological issues and the rise of environmental criticism across the discipline of the humanities are bringing the question of animal to a new prominence" (Connor 577). As a small step towards understanding the fauna in Nabokov's work, this note will list more than 300 animal species mentioned in his extant prose fiction, and show that this is an extraordinary number: an argument for the specificity and variety of Nabokov's writing, a testament to his tendency to meticulously label and categorize phenomena, and evidence of Nabokov's expansive interest in non-human animals.

In addition to Nabokov's numerous moths and butterflies — enumerated with 220 figures in Zimmer Dieter's e-book "A Guide to Nabokov's Butterflies and Moths" — Nabokov names more than 10 species of marine mammals; 14 species of reptiles; 19 types of fish; 70 insects (excluding moths and butterflies); more than 215 land mammals (including 80 types of birds), and a range of amphibians, arachnids, mollusks, crustaceans, and marine invertebrates. The list of species below includes Nabokov's references to a family name and its subspecies. The subspecies are listed in square brackets. The novels and novellas in which the species appear are listed in abbreviated form, in square brackets.

---

[1] Book length: *Fine Lines: Vladimir Nabokov's Scientific Art* (Yale 2016), edited by Stephen H. Blackwell and Kurt Johnson; *A Guide to Nabokov's Butterflies and Moths* (2012) by Dieter Zimmer; *Nabokov's Lepidoptera: Genres and Genera* (Ardis 1985) by Joann Karges; *Nabokov's Blues: The Scientific Odyssey of a Literary Genius* (2001), edited by Kurt Johnson and Steve Coats. For a sample of journal articles, consider: Butler, Diana. "Lolita Lepidoptera." *New World Writing*, vol. 16, 1960, pp. 58–84; Ramey, James. "Parasitism and 'Pale Fire's Camouflage: The King-Bot, the Crown Jewels and the Man in the Brown Macintosh." *Comparative Literature Studies*, vol. 41, no. 2, 2004, pp. 185–213.

REPTILES
alligator [G, IB], chelonian [KQK], crocodile [A, G, Gl, KQK, LDe], serpent [G, KQK, LD, LH, P, PF, SK] [sea [Gl], water [BS]], snake [A, BS, D, G, Gl, IB, L, LD, OL] [amethystine [G, IB], anaconda [LD], boa [A, BS, LD], copperhead [A]], lizard [G, Gl, KQK, LD] [chameleon [SK]], turtle [D, G, Gl, IB].

INSECTS
ant [A, BS, G, Gl, P, PF, SK] [Silesian river ant [A]], bee [G, LD, SK], beetle [A, D, G, L, LD, LDe, LH, P] [cockchafer [IB], dung-beetle [A, G], ladybird [A], scarab [A, KQK, LH], stag [BS], weevil [A]], bedbug [A, D, G, KQK, PF], bumblebee [G, Gl, LDe, M], cantharid [A], cicada [A, Gl, L, LD, PF], cockroach [IB, KQK], cricket [A, BS, D, Ey, Gl, L, LD, LH, OL, PF] [katydid [PF]], flea [A, G, Gl], fly [D, G, Gl, IB, L, LDe, M, P, PF, SK] [lampyrid [M], black fly [D, G], blowfly [Gl], botfly [PF], bright-green [L], demoiselle [M], dragonfly [G, Gl, LD, SK, M, P] [emerald [D], libellula [A]], firefly [A, BS, En, IB, PF] [luciola [PF]], gadfly [G, LDe], gnat [A, L], midge [G, Gl, M, SK] [golden [L]], nettlefly [LH], horsefly [G, Gl, IB, P], housefly [Gl, LH], king-bot [PF], May fly [G, L]], grasshopper [A, BS, G, L, PF], hornet [KQK, L], inchworm [G, PF], locust [G, PF], louse [A] [silver [LH]], mantis [praying [LH]], mite [A, BS, G], mosquito [A, G, KQK, LDe, P], roly-poly [A, KQK, L], roach [A], silverfish [L], spindle [BS, KQK, P], spider [A, BS, D, En, Ey, G, Gl, IB, L, LDe, LH, P, PF, SK] [daddy-longlegs [IB], water [G, SK]], tick [PF], wasp [A, G, LDe] [ichneumon [A], sand [G], yellow [LDe]], worm [A, D, G, Gl, LH, P, PF] [black [M], earthworm [BS, G, TT], white [LH]].

BIRDS
bluebird [A], canary [A, G, Gl, IB, L, SK], chicken [A, D, G, KQK, LDe, P, PF], crane [Gl, SK], crow [BS, D, G, Gl, IB, LDe], cuckoo [G, P], dodo [A], dove [A, BS, D, G, Gl, KQK, L, P, SK], duck [G, LH] [fuligula [A], mallard [LH], tufted [A], wild [G], wood [PF]], eagle [BS, D, G, LD, LDe, PF], eider [LD, LDe, PF], falcon [G, Gl, IB, PF], finch [A], flamingo [A, G, Gl, L, LH, P, PF], goose [A, BS, D, Ey, G, Gl, KQK, L, LD, LH, PF, SK] [wild [BS, P]], grebe [A] [crested [A]], grouse [PF] [capercaillie [PF], hazel [A], mountain [A]], gull [A, G] [sea [G, KQK, M, PF], white [BS]], hawfinch [A], hawk [A, G, L], hoopoe [A, G], humming-bird [L, P] [New World [A]], jay [G, Gl], lark [D, G, M] [skylark [D, G, P]], magpie [G, SK] [blue], mockingbird [PF], nightingale [A, D, G, Gl, LH, M], oriole [G, LDe, PF] [golden [BS, P]], ostrich [A], owl [A, D, G, LD, LH, M, P, SK] [night [G], Parluggian [A], winter [LH]], paleotropic sunbird [A], parakeet [G], parrot [BS, D, Ey, Gl, LDe, LH, PF] [ara [LH], macaw [LH]], peacock [A, BS, Ey, G, KQK, L, LD, LDe, M, P, TT], penguin [D, G, Gl], pheasant [A, BS, G, PF] [Chinese [Gl], golden], pigeon [A, BS, G, Gl, LDe, LH, P, PF, SK] [ringdove [M], tumbler [G, PF, SK]], raven [L, LD] [blue [A]], robin [BS] [ruddock [BS]], rush [LDe], silktail [PF], Sitka Kinglet [A], stork [G, L, LDe], sparrow [A, BS, D, G, Gl, KQK, L, LD, LDe, LH, M], starling [A, L, M], swan [A, Ey, G, Gl, IB, LDe, PF], swallow [A, En, G, IB, KQK, LDe, PF, SK, TT], thrush [A, LH] [red-breasted], titmouse [Gl], Tuscan Firecrest [A], turkey [A, D, Gl, KQK, LH], vulture [L], warbler [yellow], waxwing [PF], woodcock [Gl, PF], woodpecker [A, D, G, IB, L].

LAND MAMMALS
alpaca [D], ant-eater [A], antelope [Gl], ape [L, LD, D, G], armadillo [A], badger [G, IB], baboon [L, D, PF], bat [BS, G, Gl, IB, P, PF, SK], bear [A, BS, G, L, LDe, LH, OL, PF, SK] [black [A, G], grizzly [LH], polar [L, LDe], sea [A, G], white [G, LD]], beaver [A, L], boar [D, G, LH, P], bunny, camel [A, D, G, Gl, KQK, LD, PF], caribou [P], cat [A, BS, D, G, Gl, KQK, L, LD, LDe, LH, OL, P] [Persian [LD]], cattle [A, BS, Ey, D, LD, LDe, LH, M, P, PF, TT], chamois [En, Gl, L], chimpanzee [KQK, PF], chinchilla [BS, G], coon-bear [TT], coyote [PF], deer [G, Gl, L, M, PF] [wapiti [G]], desman [A],

dog [D, G, Gl, IB, KQK, L, LD, LDe, LH, OL, PF, TT] [Alsatian [G, KQK, LD, LH, P], bloodhound [A], borzoi [IB], boxer [PF], bulldog [Ey, G, IB, L, SK, TT], Chihuahua [LH], cocker spaniel [L], cougar [A], dachshund [A, BS, Gl, KQK, LD, LDe, M], dackel [A, KQK, LH], dingo [Gl], gundog [G], greyhound [LD], labrador [A], lapdog [L], Pekinese [LD], pug [G, KQK, SK], poodle [A, G, Gl, L, M], poodle-doodle [A], setter [L, D, G], sheepdog [Gl], spitz [TT], St. Bernard [L], terrier [A, G, L] [fox [En, G, Gl, KQK], highland [A], Skye [PF, SK], Scotch [P], pointer [L], Yorkshire [A]], whippet [Gl]], donkey [BS, D, Gl, KQK, LDe, LH, M, P], dromedary [Gl, L], elephant [A, G, KQK, L, LD, LDe, LH, PF, TT], ermine [LDe], ferret [A, Gl, KQK], fox [BS, Ey, G, Gl, LD, LH, PF, SK, TT] [arctic [L]], gazelle [A, G, SK], giraffe [G, LDe, PF] [okapi [A]], goat [A, D, G, Gl, KQK, L, LH], gorilla [LH], guinea pig [A, L, M], hare [G] [white [G]], hedgehog [A], horse [A, BS, D, Ey, G, Gl, KQK, L, LDe, M, SK] [pony [G, LDe, LH, PF] [Cossak [A], Shetland [A]], hippopotamus [Gl, KQK, PF], hyena [En, G, IB, TT], kangaroo [A, L], koala [A], lama [G], lemming [G, LH], lemur [A, BS], leopard [BS, D, LH, PF, SK], lion [A, BS, D, G, Gl, KQK, LDe, LH, P] [mountain [A], Persian [Ey]], lynx [A, LD], mammoth [G, PF], marmot [L], marten [Gl], mink [A, BS, KQK, LH], mule [A, G, L], mole [A, BS, D, Ey, G, KQK], monkey [A, BS, D, Ey, G, KQK, LD, LH, SK], mouse [BS, D, G, Gl, IB, KQK, L, LD, LDe, M, SK, TT] [field [A, Ey], white [D, G]], nutria [A], oryx [A], ox [L] [aurochs [L, LH]], panda [PF], panther [G, LD], pig [D, IB, KQK, L, M], polcat, porcupine [P, PF], puma [A, BS], rabbit [A, D, En, G, Gl, L, LD, LDe, LH, P, SK], rat [A, D, G, IB, L, LH, P, PF] [biped [LH]], sable [G, PF], sea-otter [A], sheep [BS, D, G, Gl, L, LD] [karakul [G, Gl, KQK]], skunk [A, P], sloth [PF], squirrel [D, G, Gl, L, LD, LDe, P, PF] [ardilla [A], grey [P]], stoat [A], tiger [A, BS, G, Gl, KQK, L, LD, LDe, LH], yak [A, G] [black [G]], zebra [A, G, Gl, KQK, L, P], wolf [G, Gl, IB, LH, PF, SK], walrus [A, PF].
dinosaur [L] [Tyrannosaurus [BS]].

MARINE MAMMALS
cockle [L], dolphin [L, LH, P] dugong [L], manatee [L], phocine [L], seahorse [PF], seal [D, G, KQK, L, LD, LH, PF], shark [A, BS], whale [BS, G].

FISH
barbel [BS], cichlid [A], chromid [BS], cod [L], eel [BS, PF], goby [G, Gl], goldfish [A, G], herring [BS, G, KQK], mackerel [KQK], megrim [A], octopus [A, En, IB, L, TT], oyster [A, Gl, M], perch [A], ray [G], roach [A], salmon [A, LD, LH, PF, SK], sardine [LH, M, PF], trout [A, D].

AMPHIBIANS, ARACHNIDS, MOLLUSKS, CRUSTACEANS, AND MARINE INVERTE-BRATE
conch [KQK], coral [A, BS], crab [G, IB, KQK, L, PF] [red [G]], crayfish [L], frog [A, Ey, G, Gl, IB, KQK, TT], golden sea snake [LH], jellyfish [BS, KQK], leech [BS, G, Gl, LD, LH], lobster [A, LD, LH], sea urchin [BS, LH], scorpion [A], shrimp [KQK, P], snail [D, P], starfish [L], tapeworm [LH], toad [BS, G, KQK, L, LH, M, PF], tortoise [A, BS, D, Ey, G, Gl, KQK, L, M, P], slug [A] [yellow [LDe]].

The list excludes fictional creatures in Nabokov's fiction (such as the March Hare and the Mock Turtle), and Nabokov's mention of mythological beings and creatures: alpheus, angel, atlas, centaur, cherub, cupid, eidolon, elf, fairy, faun, demon, devil, dragon, dryad, ghost, ghoul, gnome, goblin, god, gremlin, griffin, houri, hydra, imp, incubus, kobold, lorelei, mermaid/merman, mimir, monster, naiad, nymph, ogre, pard, peri, parandrus, phantasm, phoenix, priapus, satyr, seraph, siren,

unicorn, werewolf, will-o'-the-wisp, wraith. The list also excludes all indirect and indeterminate references, such as "pink snails" (*Pnin* 84), "Japanese fish" (*Pale Fire* 197), and "A silver-and-sable skybab squirrel" (*Ada* 71).

My hope is that the list will be useful as an index, standalone document, and visual map. The list can be scanned for patterns and irregularities; the animal species can be studied according to how they are distributed across Nabokov's works; and the interested reader can use the list to look up the words in their original contexts.

For a computer search to be accurate and comprehensive, it would need to scan for all named animal species (at 1.5 million) multiplied by the number of languages used in an author's text. Even if a list of all named animal species was available, the available computer programs for calculation, classification and listing generate false positives and fail to identify most regionalisms, neologisms, misspellings, and idiosyncratic spellings. False positives in automatic indexing is primarily generated by words with "multiple senses and multiple types of usage in different context[s]" and "synonyms and semantically related words" (Hofmann 289). Programs for text analysis, such as WordSmith, TACT, and AntConc, are useful for generating data on the distribution, number, and types of words, sentences, and paragraphs in a text. Large-scale text analysis is used to identify and characterize authors based on the size of their vocabulary, typical collocations, average sentence-lengths, frequencies of articles, prepositions and conjunctions, and so on. There are even a number of computational linguistic programs that do qualitative readings, using "general sentiment analysis" (Hutto and Gilbert 216). However, while these tools are good at understanding big-data sets, they lack precision: referential ambiguity, for instance, poses such a challenge to computers that it is presented as "an alternative to the Turing Test" (Levesque et al. 552).[2] To correctly identify the intended meaning of a word in a sentence is frequently beyond what can be done with "statistical techniques over text corpora" (Levesque et al. 552). For example, the letter combination 'horse' is a homograph with six meanings (WordNet), only one of which refers to a quadruped herbivorous animal. To accurately designate the horse as an herbivorous animal the computer program would have to read and understand the word in context.[3] In addition, for the purpose of doing large-scale text analysis on an author's works, there is the question of having access to authoritative texts. To limit inaccuracies, the list derives from a manual calculation, using the Penguin editions as a primary source-text.

It may appear tedious and anti-cerebral to offer a list as any form of argument or question. On the other hand, Nabokov's own writings are generally appreciative of non-symbolic and non-interpretative criticism, where the complex structure of the text alone is a source of discussion. The list generated in this note is argumentative and provocative: it suggests that a reading of numerous of Nabokov's works can be more representative of his writing than a focus on a single work. For instance, no bird specimen plays a major part in the plot of Nabokov's fiction, but he names more than 80 bird species in his writings. Regarding the aggregate number of animal species, more than three hundred named species reflects an encyclopedic way of writing and suggests a high level of denominational specificity. For instance, Nabokov's fiction names multiple subspecies, including more than 30 types of dogs and 20 types of flies.

---

[2] The Turing Test tests whether a machine exhibits the type of thinking associated with human intelligence. In the test, a human interrogates a machine over text and is asked on the basis of the responses in text whether he or she is communicating with a human or machine; the test "has the advantage of drawing a fairly sharp line between the physical and the intellectual capacities of a man" (Turing 434).

[3] As an example of a recent (2019) measure of understanding words in context, the most sophisticated models solve pronoun disambiguation at a rate of about 75% (Kocijan et al. 4837).

A partial explanation for Nabokov's long list of species is that he used "a singularly extensive vocabulary" (Durantaye 77–78), chose "his words with extreme care" (Durantaye 77–78), and "saw the world in its marvelous specificity" (Bethea 338). With a "passion for dictionary research" (Nabokov and Shrayer 551), Nabokov wrote in a style sometimes faulted for its "excessive cataloguing of details and physical objects" (Nabokov and Shrayer 550). Therefore, Nabokov's long list of animal species is not just indicative of an interest in nonhuman animals, but is also symptomatic of his diverse and precise vocabulary. Put differently, there is not just an abundance of animal species in Nabokov's fiction, there is also — for instance — a rich flora. There are "thirty-one tree species named in *Pnin* [alone]" (Blackwell and Johnson 5) and a single sentence from *Pale Fire* enumerates thirteen types of trees: "Jove's stout oak and two others: the thunder-cloven from Britain, the knotty-entrailed from a Mediterranean island; a weather-fending line (now lime), a phoenix (now date palm), a pine and a cedar (*Cedrus*), all insular; a Venetian sycamore tree (*Acer*); two willows, the green, likewise from Venice, the hoarleaved from Denmark; a midsummer elm, its barky fingers enringed with ivy; a midsummer mulberry, its shade inviting to tarry; and a clown's sad cypress from Illyria" (228).

Another part of the explanation for Nabokov's large fauna is, of course, about theme rather than style. There are passages that demonstrate an extraordinary engagement with natural life, such as a parenthetical description of bird sounds in *Ada*: "a clamorous caroling — bright warbles, sweet whistles, chirps, trills, twitters, rasping caws and tender chew-chews" (*Ada* 36). However, except for butterflies and moths, which are frequently depicted in their natural habit ("Thinking like a naturalist, he would have asked himself only what butterfly would be the right one in a given habitat, and what behavior it would display" (Zimmer)), Nabokov's animals are frequently artificial. Nabokov's animals are seldom present as living creatures; instead, they are inflated, eaten, stuffed, and worn. His fictional fauna is partly made of rubber, chocolate, stone, diamond, cast-iron, pencil, paint, cotton, wool, textile, and "porcelain animals with glossy rumps" (*King* 36). Rather than existing as independent creatures, the animals are frequently part of inventive metaphors ("I could only be compared to a colour-blind chameleon" (*Sebastian Knight* 57)), vivid similes ("sealskin-lined scarlet skies" (*Pale Fire* 73)), and sharp descriptions ("silverfish eyelashes" (*Lolita* 190); "I perceived my entire skin as that of a leopard painted by a meticulous lunatic from a broken home" (*Harlequins* 205)). Similarly, while there are few leeches and peacocks in Nabokov's fiction, objects are described as leech-black, peacock-blue, salmon-colored, mouse-grey, piggy-pink, and "reptile-green" (*Harlequins* 81). While there are few owls, lions, rats and rays in Nabokov's fiction, people — on the other hand — are spindly, owlish, leonine, waspy, toadlike, raylike, ratlike, rabbitlike, piglike, mouselike, froglike, crablike, hawk-like, swanlike, and "batlike" (*Pale Fire* 101), and so on. With notable exceptions, Nabokov sketches a diverse anthropocentric fauna, where the closest many of its human characters get to engage with the animal kingdom is by going to dinner or by wearing tortoiseshell glasses, zebra pajamas, a moleskin coat, or an ermine wrap.

Finally, Nabokov's impressive list of animal species invites a comparative question that cannot yet be answered decisively: did any other Anglophone twentieth-century author write as expansively on animals as Nabokov? As it happens, while animal studies has succeeded in answering and asking complex epistemological questions about the status and meaning of nonhuman animals in literature, there is almost no hard data about their numbers and types.[4] This short note

---

[4] For exceptions, consider: Warodell, Johan "Bloodthirsty Pigeons and Sentimental Bats: Conrad's Unreal Animals" *Modern Fiction Studies*, vol. 67, no. 3, 2021, pp. 468–486, which lists 150 animals species in Conrad's fictions, and Warodell, Johan "Three Hundred Animal Species in Woolf's Fiction" *Notes and Queries*, vol. 67, no. 1, 2020, pp. 138–140.

is part of a larger project — *Species Richness in Modern Texts: Expanding the Character List* — where I attempt to exhaustively explore the entire fauna of canonical modern writers. My hope is that the example of Nabokov will show the potential for uncovering a host of species and characters that make a collective argument for the complexity and richness of animal life, even in writers who are predominantly associated with a singular animal.

Works Cited

Bethea, David M. *The Superstitious Muse: Thinking Russian Literature Mythopoetically*. Boston, Academic Studies Press, 2009.

Blackwell, Stephen, and Kurt Johnson. "Introduction." *Fine Lines: Vladimir Nabokov's Scientific Art*, edited by Stephen Blackwell and Kurt Johnson, Yale UP, 2016, pp. 1–26.

Connor, Steven. "Thinking Perhaps Begins There: The Question of the Animal." *Textual Practice,* vol. 21, no. 3, 2007, pp. 577–84.

Durantaye, Leland De la. *Style is Matter: The Moral Art of Vladimir Nabokov.* Cornell UP, 2007.

Hofmann, Thomas. "Probabilistic Latent Semantic Analysis." *Proceedings of the Fifteenth Conference on Uncertainty in Artificial Intelligence*, 2013, pp. 289–296.

Hutto, C.J and Eric Gilbert. "VADER: A Parsimonious Rule-based Model for Sentiment Analysis of Social Media Text." *Proceedings of the Eight International AAAI Conference on Weblogs and Social Media*, June 1–4 2014 Ann Arbor, Michigan, USA, AAAI Press, pp. 216–225.

Kocijan, Vid, et al. "A Surprisingly Robust Trick for the Winograd Schema Challenge." *Proceedings of the 57th Annual Meeting of the Association for Computational Linguistics*, July 28 – August 2 2019 Florence, Italy, Association for Computational Linguistics, pp. 4837–4842.

Levesque, Hector, et al. "The Winograd Schema Challenge." *AAAI Spring Symposium: Logical Formalizations of Commonsense Reasoning*, June 10–14 2012, University of Rome, AAAI Press, pp. 552–561.

Nabokov, Dmitri, and Maxim D Shrayer. "After Rapture and Recapture: Transformations in the Drafts of Nabokov's Stories." *The Russian Review*, vol. 58, no. 4, 1999, pp. 548–564.

Nabokov, Vladimir. *Glory.* Penguin Classics, 2017.

---. *King, Queen, Knave.* Penguin Classics, 2017.

---. *Look at the Harlequins.* Penguin Classics, 2017.

---. *Lolita.* Penguin Classics, 2016.

---. *Pale Fire.* Penguin Classics, 2011.

---. *Pnin.* Penguin Books, 2016.

---. *The Real Life of Sebastian Knight.* Penguin Classics, 2011.

Turing, Alan. "Computing Machinery and Intelligence." *MIND: A Quarterly Review of Psychology and Philosophy*, vol. lix, no. 236, 1950, pp. 433–460.

"WordNet Search." *WordNet*, Princeton University, 2020.

Zimmer, Dieter. "Butterflies, Not Flying Symbols." *A Guide to Nabokov's Butterflies and Moths*, 2012, http://www.d-e-zimmer.de/eGuide/Intro3%20(Symbols).htm