

Allied to the ordinary crossword puzzle, and often found in crossword puzzle magazines, is a type of puzzle known as a "Kriss Kross." Essentially, it consists of a blank diagram of interlocking letter paths, and a word list representing some particular category, such as trees, birds, or cities. The number of words on the list exactly equals the number of words required to fill the blank diagram, and it is the solver's problem to insert the words into the diagram in such a fashion that they interlock correctly, with the entire word list being used and the diagram being filled completely.

Most Kriss Kross puzzles offered to the public are easy to solve, for a number of reasons:

- (a) the diagram is relatively small, with a correspondingly short word list;
- (b) the letter paths of which the diagram consists vary in length, so that the number of words capable of being considered for any given path is only a fraction of the entire word list;
- (c) the diagram is loosely constructed, with most words connecting to only one or two other words.

Obviously, a conventional Kriss Kross puzzle is no challenge to an intelligent wordsmith, and does not belong in the pages of WORD WAYS.

Fortunately, it is possible to make Kriss Kross puzzles incredibly more difficult by resorting to these expedients:

- (a) making the diagram a large one, with a correspondingly long word list accompanying it;
- (b) making all letter paths in the diagram equal in length, so that any word in the list is theoretically capable of being inserted anywhere in the diagram;
- (c) constructing a diagram characterized by multiply interlocking words, with many words intersecting three or four other words, and some intersecting five or even six other words.

A Kriss Kross puzzle devised in accordance with these specifications would try the abilities of the most competent puzzler. To determine the degree of your competence, we are presenting just that kind of a puzzle.

The diagram that follows consists of 99 tightly interlocking letter paths, each of which must be filled with a seven-letter word. The accompanying word list provides the names of 99 animals—mammals, generally—all of them seven-letter words. Your problem is to insert all of the words in the list into the diagram so that they interlock correctly and you have solved the puzzle.

Each word may be used once and once only, and must be spelled exactly as shown in the list. Each horizontal word must read from left to right, and each vertical word must read downward. Each individual space in the diagram is intended for one single alphabetic letter. There are no tricks of any sort involved.

There is only one correct solution to this puzzle: in other words, there is only one way of arranging the words in our list so that they fill the given diagram completely. It is possible to find that solution by the rigorous exercise of logic. The fastest way of solving the puzzle is to start with one of the most intricate sections in the diagram, finding a word combination that fits into that section. Chances are, it will be the combination that actually belongs in that section, thereby reducing both the size and the complexity of the problem that remains.

This puzzle was constructed by Mr. Edward L. Lee, of St. Petersburg, Florida. Can you solve it, can you meet his challenge successfully? The correct solution will be given in the next issue of WORD WAYS, thereby allowing you ample time for your effort.

All 99 words, incidentally, were taken from the Second Edition of *Webster's New International Dictionary of the English Language*, though one of them, LAGOMYS, was deleted from the latest printings of that dictionary. LAGOMYS is the type genus of the pika or calling hare, an animal closely related to the rabbit.

So as not to distract you in your puzzle solving efforts, all words in our list are spelled solidly. Actually, however, five of them are properly written with a hyphen, an apostrophe, and/or an internal space:

- No. 5—ANT LION
- No. 29—HALF-APE
- No. 51—LYRE BAT
- No. 57—MUD LARK
- No. 96—YOUNG 'UN

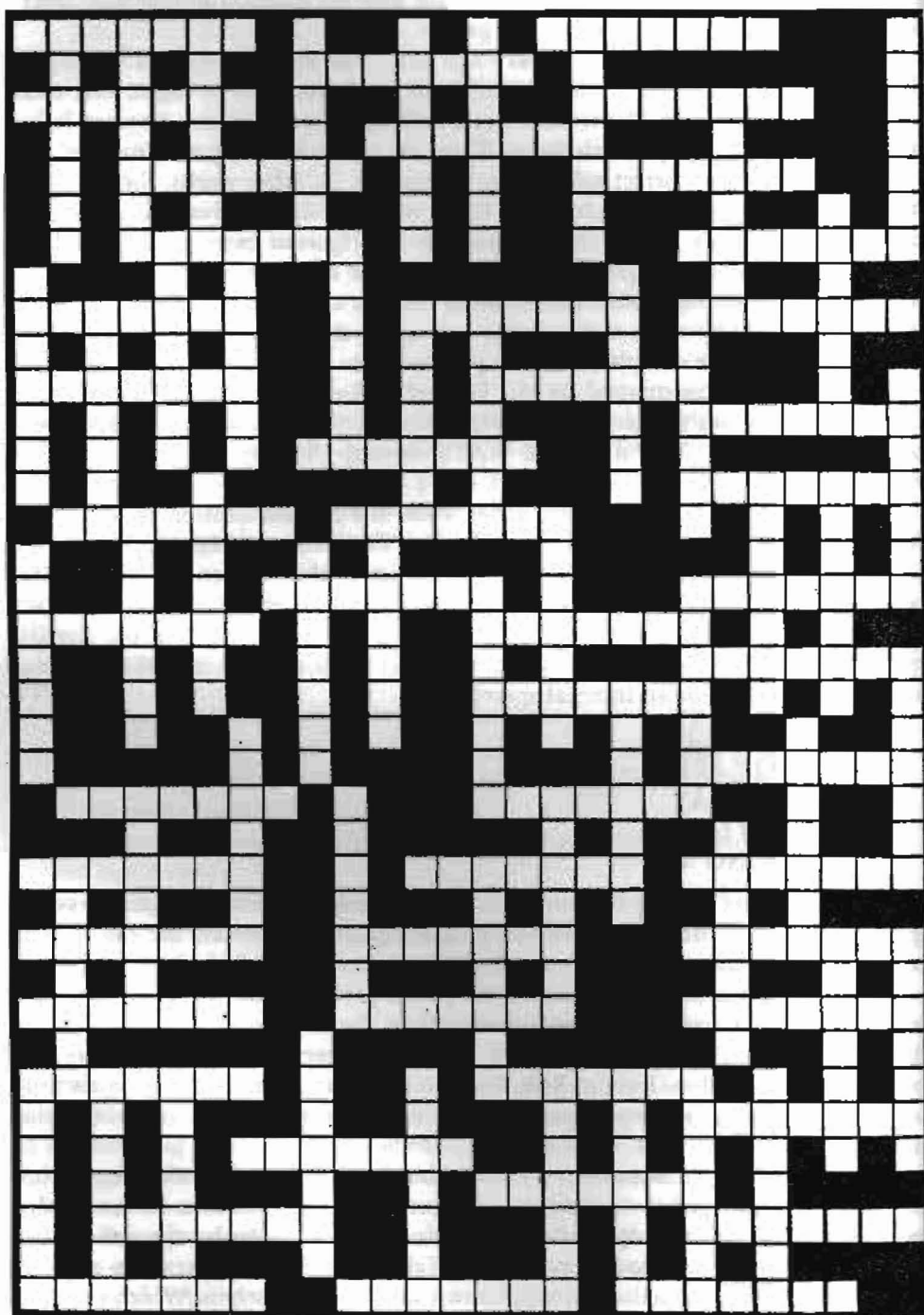
For the purpose of solving the puzzle, these orthographical irregularities are to be ignored. We have listed the words in precise alphabetical order, for convenient reference. Their arrangement in the diagram is wholly unalphabetical.

Aside from being an integral part of the puzzle problem, our word list makes an interesting vocabulary study. Among the words in the list, for instance, there is one designating a fabulous, lizardlike monster of Maori legend usually said to be amphibian and to feed on human flesh, but sometimes represented as harmless and inhabiting caves. Can you recognize this interesting word without consulting the dictionary?

There are many other noteworthy names on the list. One, for example, retains its meaning unchanged if we eliminate the first letter, and continues to convey the same meaning if we also delete the sixth letter. Do you recognize the word from our description of it? Another word is of Nahuatl (Aztec) origin; cross out the first letter, and what remains is a well-known word of Zúñi origin. Which one?

Your own research will uncover many other worthwhile items of information.

The Kriss Kross Diagram



The Word List

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|--------------|-------------|-------------|-------------|
| 1. ACRITAN | 26. GREENUK | 51. LYREBAT | 76. SKYBALD |
| 2. AGOUARA | 27. GYMNURA | 52. MAPACHE | 77. SNARLER |
| 3. AILURUS | 28. HAKENAY | 53. MARMOSE | 78. SOUSLIK |
| 4. ALGAZEL | 29. HALFAPE | 54. MEERKAT | 79. SPANKER |
| 5. ANTLION | 30. HAMSTER | 55. MINTJAC | 80. STAGGIE |
| 6. APELING | 31. HANUMAN | 56. MOUSTOC | 81. STEMBOK |
| 7. ASSAPAN | 32. HOGLING | 57. MUDLARK | 82. STENTOR |
| 8. BIGHORN | 33. HUMBLIE | 58. MUNTJAK | 83. SYAGUSH |
| 9. BLARINA | 34. IMPALLA | 59. MUSTELA | 84. TAGASSU |
| 10. BLAUBOK | 35. IMPOOFO | 60. MYCETES | 85. TAMARAO |
| 11. BLESBOK | 36. ISOTYPE | 61. NEOTOMA | 86. TANIWHA |
| 12. BUBALIS | 37. JACKASS | 62. NEUTRIA | 87. TANTANY |
| 13. CARIBOU | 38. KALASIE | 63. ONDATRA | 88. TERRIER |
| 14. CHINCHA | 39. KARAGAN | 64. OXYAENA | 89. TIMARAU |
| 15. CYNOMYS | 40. KASTURA | 65. OYAPOCK | 90. TRAPPER |
| 16. DEFASSA | 41. KLIPDAS | 66. PENTAIL | 91. TROTTER |
| 17. DESTREER | 42. KOOMRAH | 67. POINTER | 92. UPEYGAN |
| 18. DINMONT | 43. LAGOMYS | 68. PYEBALD | 93. VIGONIA |
| 19. EANLING | 44. LAMASSU | 69. REDPOLE | 94. VIVERRA |
| 20. ECHIMYS | 45. LEMMING | 70. REYNARD | 95. YLESPIL |
| 21. ELEFANT | 46. LEMURID | 71. RIGGALD | 96. YOUNGUN |
| 22. EMGALLA | 47. LIBERDE | 72. RIGINAL | 97. ZAMOUSE |
| 23. GANGREL | 48. LITTLIN | 73. SCIURUS | 98. ZEBROID |
| 24. GAZELLA | 49. LONGEAR | 74. SHERRUG | 99. ZORILLA |
| 25. GENETTA | 50. LUCIVEE | 75. SIRENIA | |

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AN ORNITHOLOGICAL ODDITY

It is a reasonably well-known fact that the turkey is a bird native to the North American continent and no other. Against this background, it is fascinating to note that the English name for the bird, **TURKEY**, indicates that the bird comes from *Turkey*, and that the French names, **DINDON** or **DINDE**, mean "of *India*."

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THE LUDOLPHIAN NUMBER

Mathematicians have long asserted that the value of the number "pi," taken to two decimal places, is 3.14. It has, of course, remained for word experts to prove this contention, by writing the alleged value in this manner:

314

Viewed in a mirror, these symbols spell **PIE**, a phonetic equivalent of **PI**