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 Zuñi origin. Which one?
Your own research will uncover many other worthwhile items of information.

*The Kriss Kross Diagram*

1. AGRITAN
2. AGOUARA
3. AILURUS
4. ALGAZEL
5. ANTLION
6. APELING
7. ASSAPAN
8. BIGHORN
9. BLARINA
10. BLAUBOK
11. BLESBOK
12. BUBALIS
13. CARIBOU
14. CHINCHA
15. CYNOMYS
16. DEFASSA
17. DESTRER
18. DINMONT
19. EANLING
20. ECHIMYS
21. ELEFANT
22. EMGALLA
23. GANGREL
24. GAZELLA
25. GENETTA

It is a reasonably well-known fact that the English word "turkey" comes from the Turkish word "nerke." Mathematicians have shown that the number e is approximately 2.71828, correct to two decimal places, in this contention, by various methods.

Viewed in a mirror...
The Word List

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

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."

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!

THE JOURNAL OF RECREATIONAL LINGUISTICS