

Visit to the Zoo of Burrs



Dino (burr puzzle, not in Zoo)

Design by Christoph Lohe

Goetz Schwandtner
German Cube Day 20.04.2024



In my puzzle collection, there is a whole zoo of burrs: 18 pieces burrs ...



In my puzzle collection, there is a whole zoo of burrs: 18 pieces burrs and 12 pieces burrs ...



In my puzzle collection, there is a whole zoo of burrs: 18 pieces burrs and 12 pieces burrs, and 6 piece burrs



Want to see more of these??
What's so special about them?

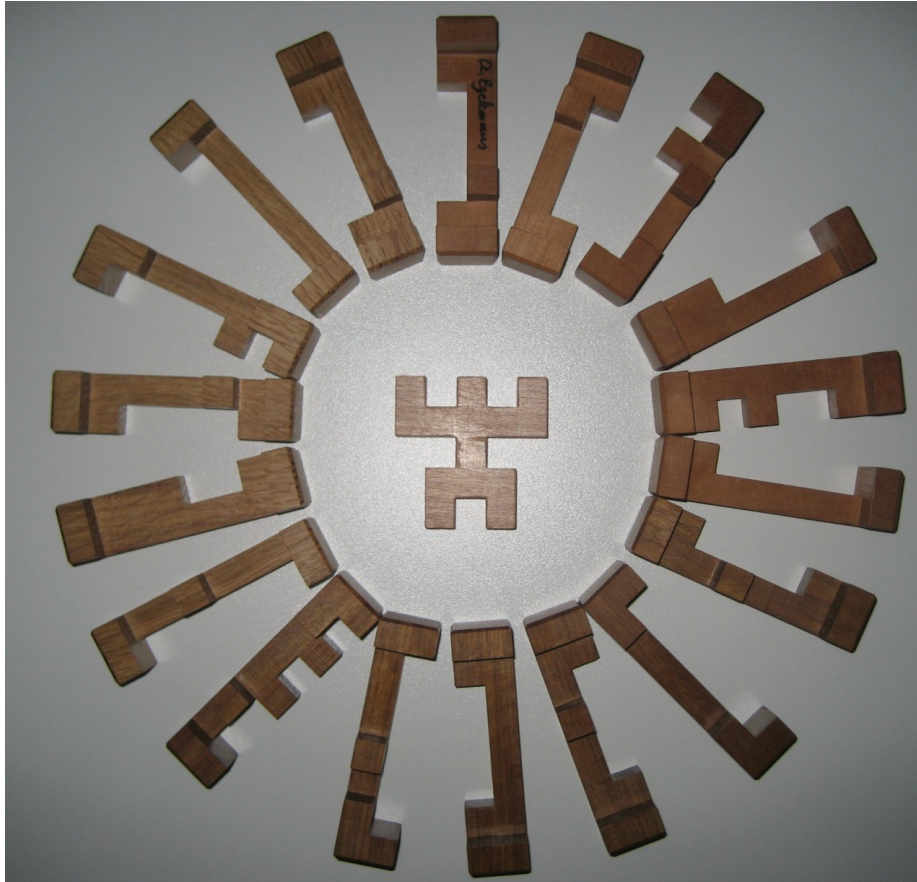
In my puzzle collection, there is a whole zoo of burrs: 18 piece burrs and 12 piece burrs, and 6 piece burrs

Let us take a look inside one of them



18 burr sticks

Let us take a look inside one of them



18 burr sticks
+ 1 Gorilla piece !

Visit to the Zoo of Burrs

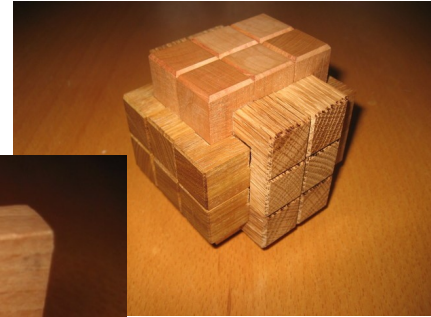
- Contains puzzles that look like regular burrs from the outside, but contain some extra pieces inside.
- Can be animal pieces, but we also allow others.
- Quick History:
 - Started with ***Free the Monkeys*** in June 2013
 - ***Save the Gorilla*** (previous slide) in July 2013
 - Collecting them in a "Zoo Group" page on my web site on 5.3.2014
 - Exactly **10 years** later, there are **now 49 puzzles** on that page
 - Still new puzzles are designed and released by various designers

Presentation of the Zoo Inhabitants

- Picture of the whole puzzle
- Picture of the special pieces
- Number of pieces and **additional pieces**
- Level: Number of linear moves to disassemble for the first few pieces (Burr-Tools!)
- Designer: see web site

Example:

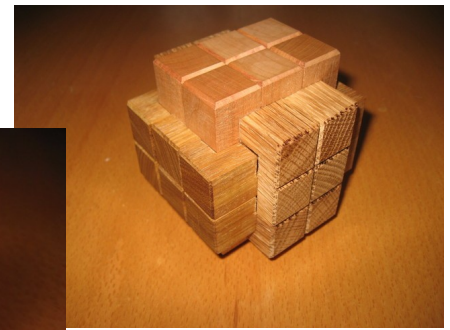
Save the Gorilla
18+1, L: 19.9.15



Free the Monkeys
18+2, L: 10.2.14.7



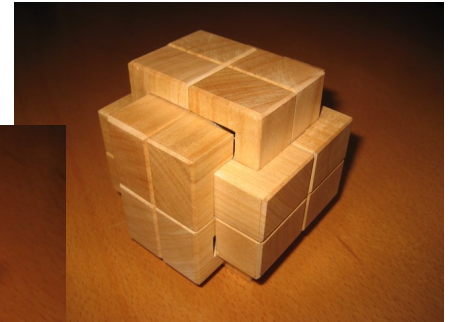
Save the Gorilla
18+1, L: 19.9.15



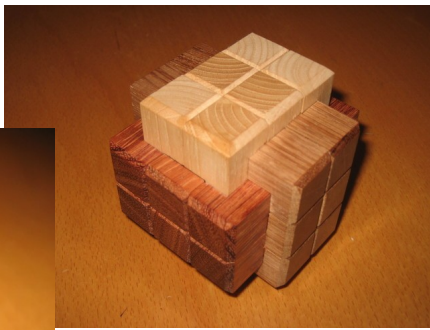
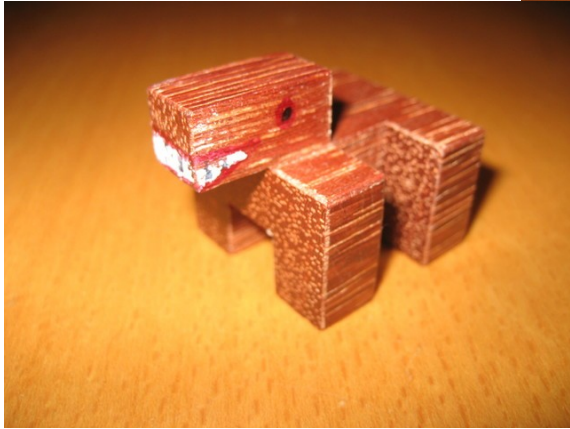
Beware of the Snake
12+1(+1), L: 40.13



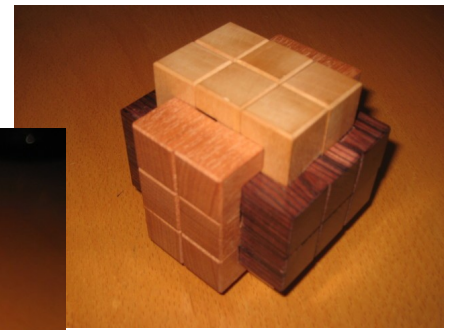
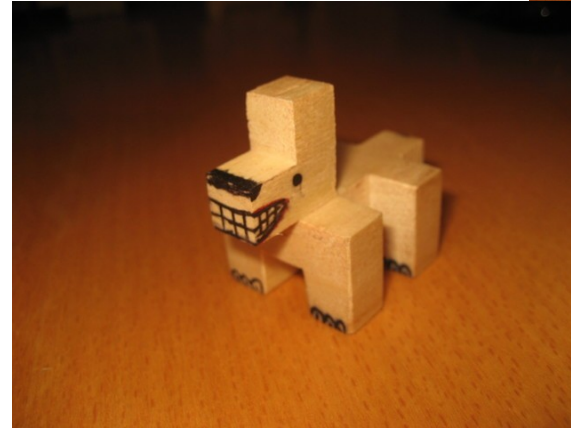
Camelride
12+1, L: 16.8.9



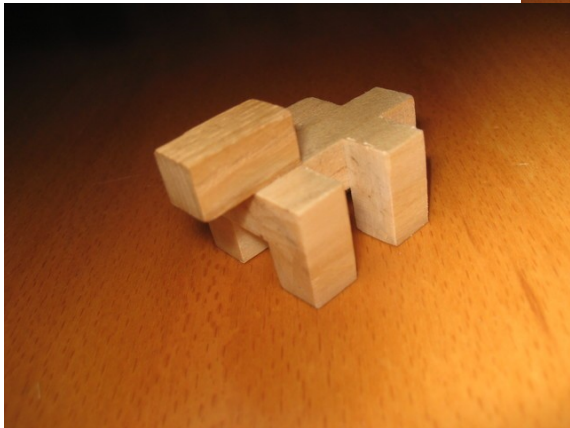
Devil's Pet 1
18+1, L: 33.13.8



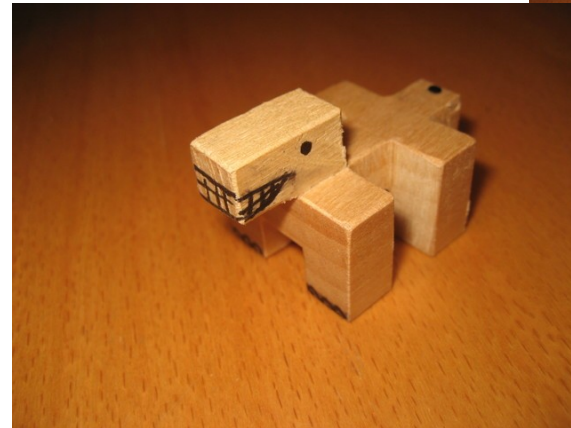
Devil's Pet 2
18+1, L: 17.9.2.10



Devil's Pet 3
18+1, L: 38.14.13.14

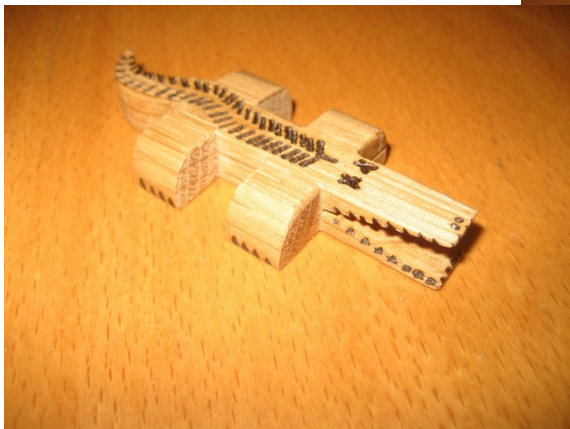


Devil's Pet 4
18+1, L: 43.8.13.8.5.10



Alligator

6+1, L: 12



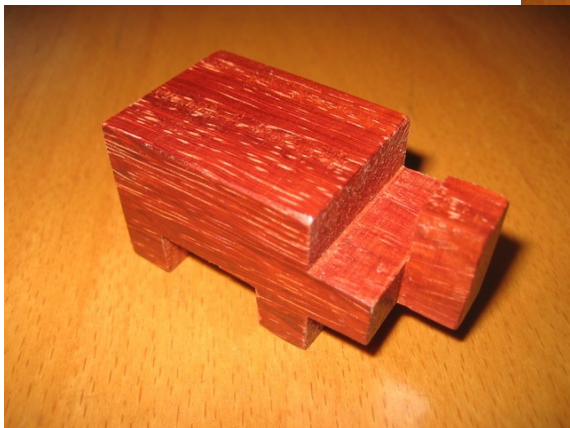
Beware of the Dogs

12+3, L: 23



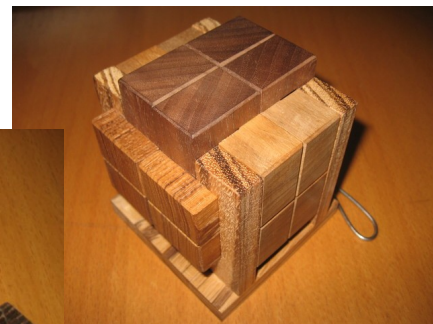
Rhinoceros

12+1, L: 31.6

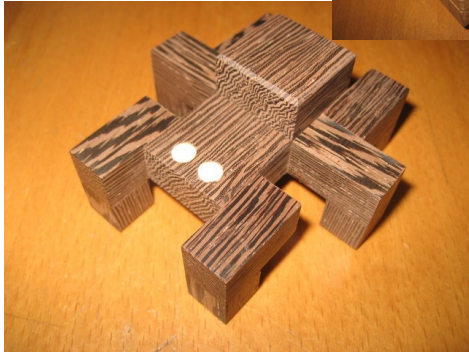


Dog Catcher

13+3, L: 34.2.8



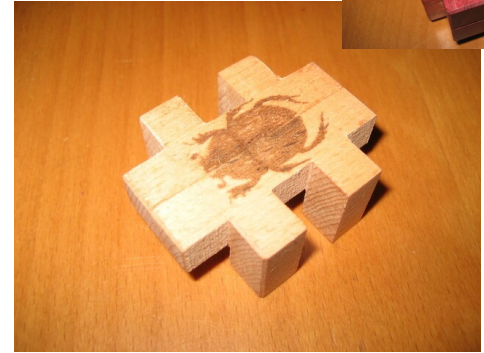
Aracna
12+1, L: 13



Fly Trap
12+3,
L: 22.2.11



Blue Beetle
18+1, L: 16



Spidernest
18+2,
L: 21.18.11.16



Fly Trap 2
18+4, L: 15



Blue Beetle 2
12+1, L: 38.6



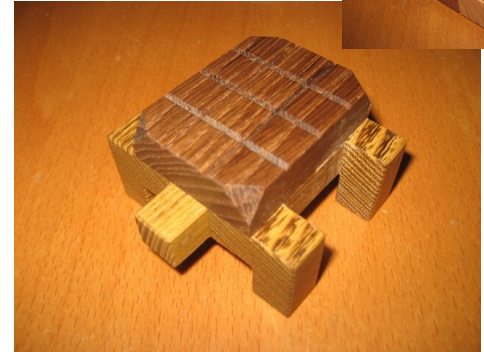
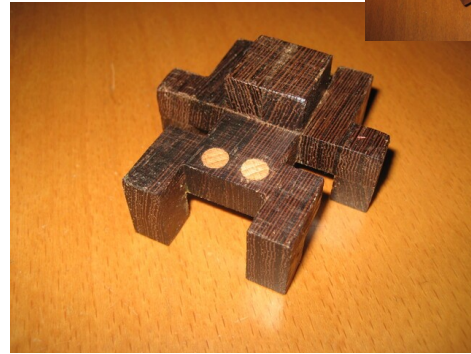
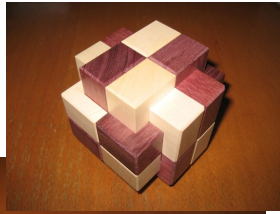
Spider Web
18+1, L: 26



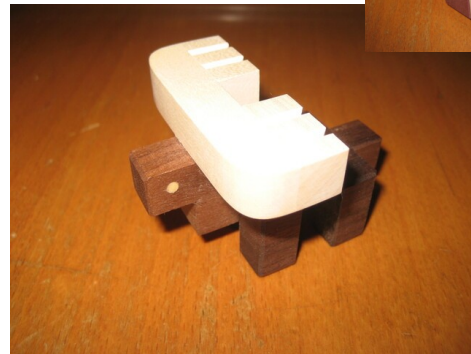
Turtle
12+1, L: 27.7



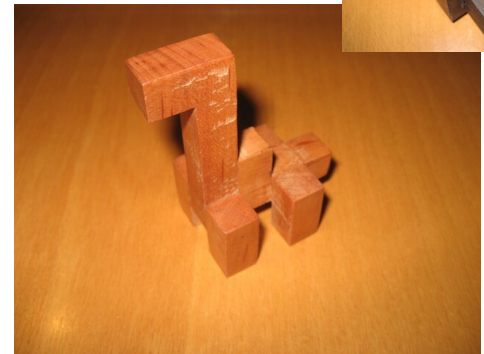
Hippo
12+1,
L: 7.8.8.3.24



Moose
12+1, L: 25.18



Giraburr
6+1,
L:25.12.10



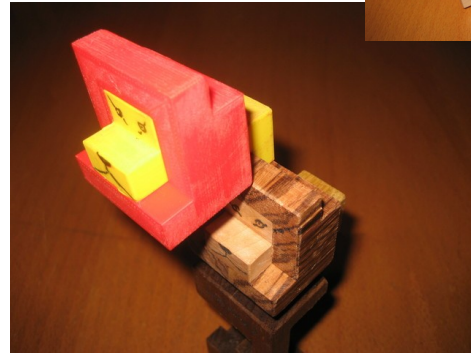
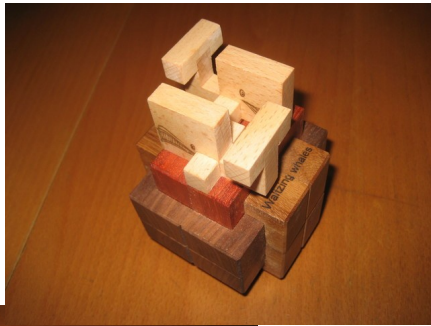
Lion King 2
12+1, L: 26



Dino
16+1, L: 20.6



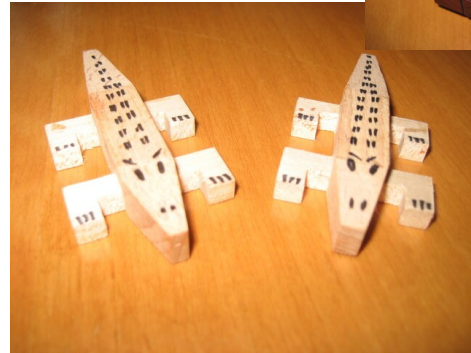
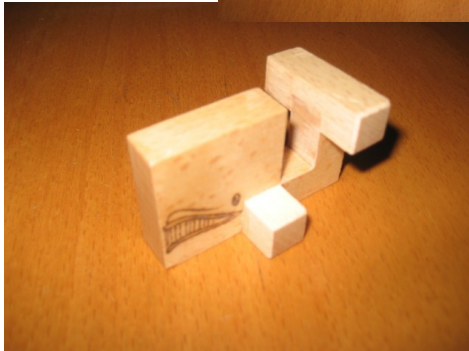
Waltzing Whales
12+2, L: 20



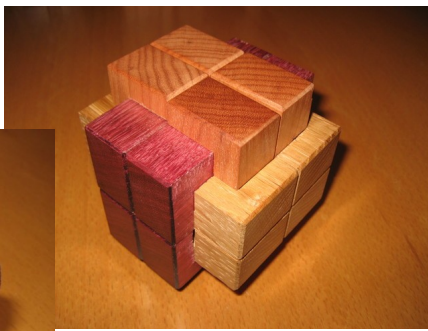
Crocs
18+2, L: 19



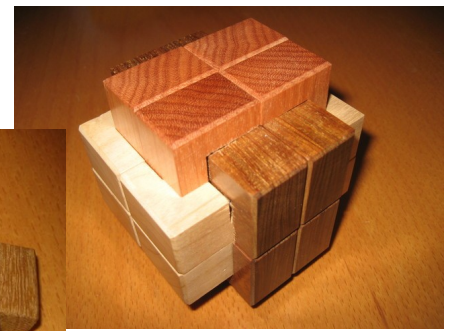
Dino 2
14+1, L: 11



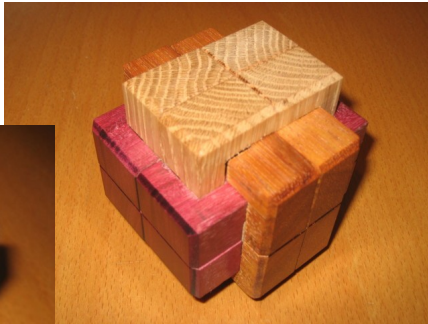
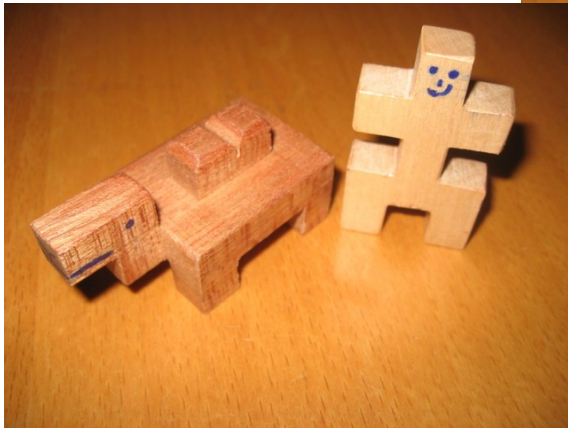
The Devil and His Pet
12+2, L: 19



Adam and Eve in
Paradise 12+2, L: 18



Gobi
12+2, L: 31.9



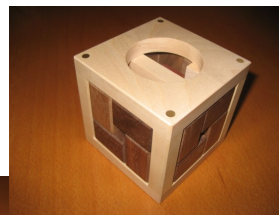
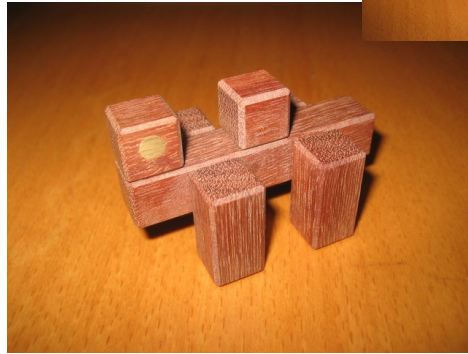
Atacama
12+2, L: 29.17



Treasure Quest
16+3(+2), L: 19



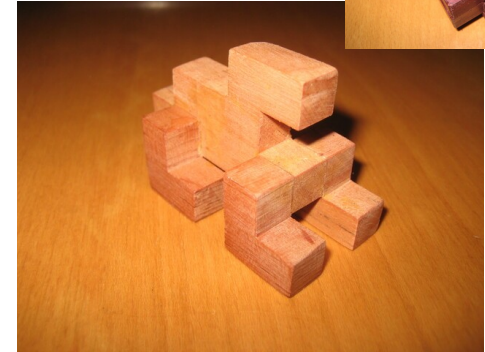
Dragon's Cave
9+1, L: 58



Dracula
6+1(+1), L: 13



Sphinx
12+1,
L: 15.10.14



Dracula 2
6+1(+1), L: 10



Bad Hare Day

12+2,

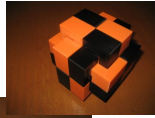
L: 12.7



Boo Burr

12+2,

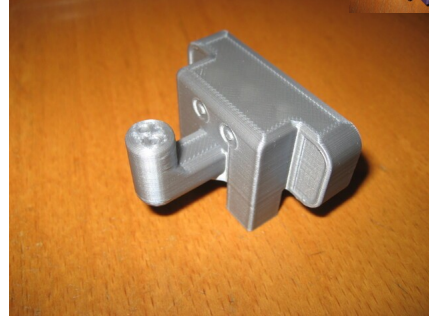
L: 4.17



Elephant Puzzle

12+1,

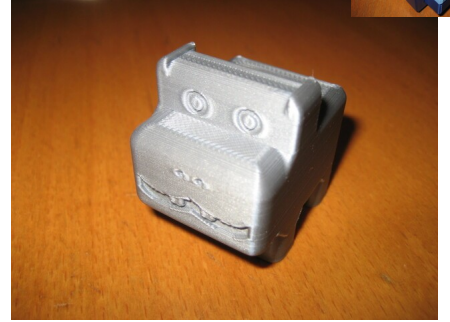
L: 16.9.3.9



Hippo Puzzle

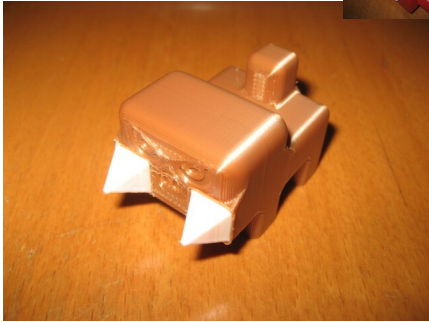
12+1,

L: 7.8.8.3.24



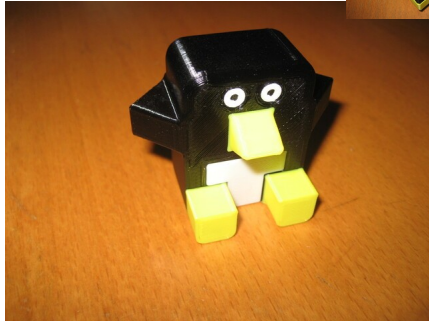
Hog Wild Puzzle

12+1, L:9.14



Iceburg

12+1, L: 19.7.7



Frogurr

12+1,

L: 12.15.10.



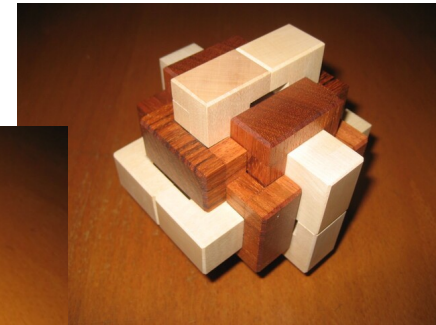
Gumball 3K
18+2, L: 12.11.15



Dozer
12+1, L: 26.2.1.1.11

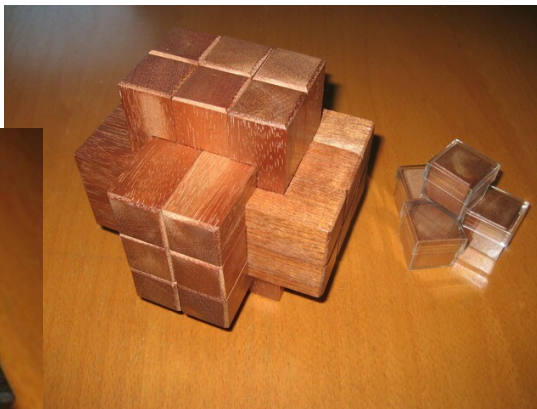
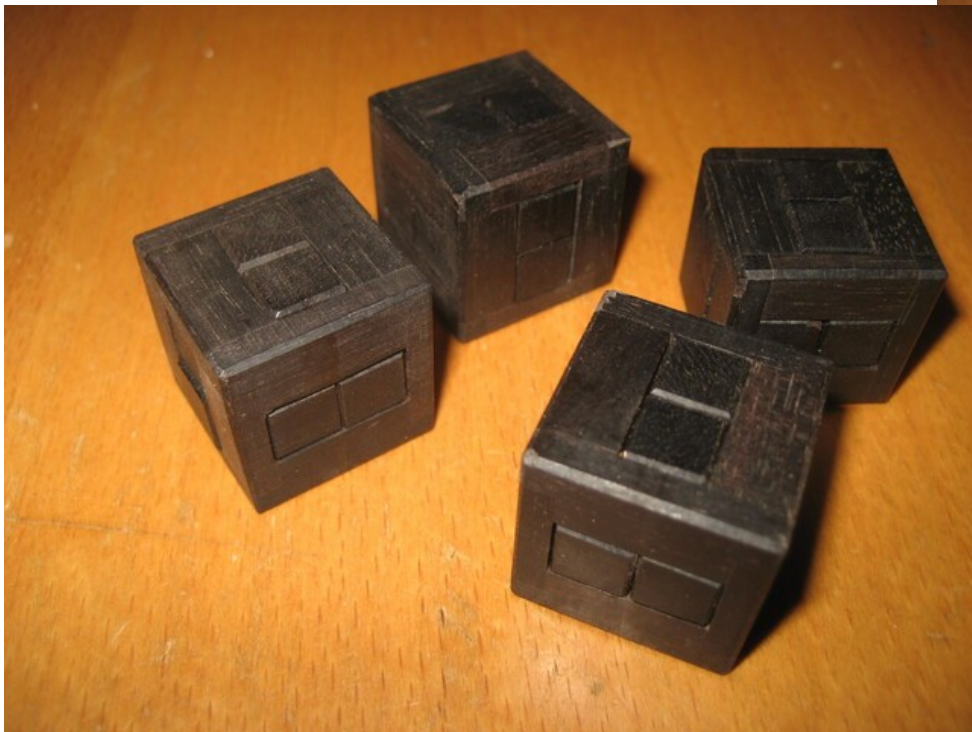


Dragster
12+1, L: 28



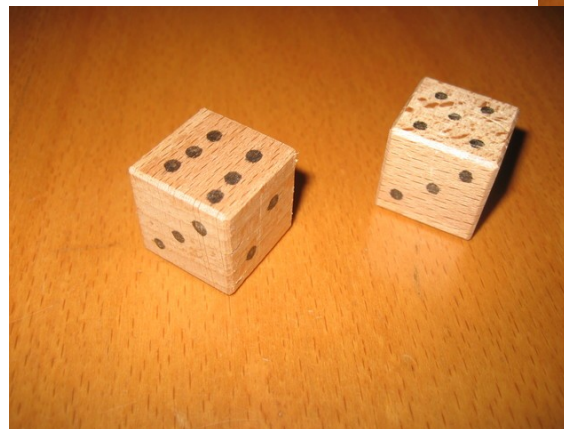
Matryoshka Burr

18+4, L: 16.3



Casino 2

18+2, L: 12.18.10



Lange Wapper Casino with 4 micro puzzles inside:

Burr-in-a-cube L: 4.6,

Vanity Box L: 23.8,

La Mente L: 11.12.13,

Chateau d'If L: 24,

all 4 are boxed 6 pieces burrs, optional: 4 wood cubes

Some Observations in the Zoo

- Various types of inside pieces and also enclosing burr layouts
- Level ranging from 4 to 58
- Mostly 18 pieces burrs and 12 pieces burrs
- 12 pieces burrs have a larger space inside.
- In some cases, the extra pieces move during the solution, also gravity assisted. For others they are firmly locked in place and give the puzzle more stability.
- Other Zoo Burrs exist, also to be found on Ishino's site (PWBP)
- Burrs with hidden burr sticks exist as well, but are not included here.

Animations of some Zoo Burrs

Erwin Bonsma created nice burr animations, among them some of zoo burrs:

- Gumball 3K:

<https://www.youtube.com/watch?v=ExHOFH7InOo>

- Gobi:

<https://www.youtube.com/watch?v=QGdvU1hjEUA>

Visit the Zoo Burr Web Site

<https://puzzles.schwandtner.info/>

The screenshot shows a web browser displaying the website "Extremely Puzzling - Goetz Schwandtner's Puzzles". The page has a dark blue header with the site name. Below the header, there is a navigation menu with several categories: "Puzzle Group: My Adventures in the Zoo of Burrs", "Packing Puzzles", "Puzzle Boxes", "Other Puzzles", and "Interlocking Explorer". A large orange arrow points to the "18pcs Burrs" category in the navigation menu. The main content area features three puzzle descriptions: "Free the Monkeys", "Save the Gorilla", and "Devil's Pet 1". Each description includes a small image of the puzzle and a brief text explanation of the puzzle's challenge and solution.

Extremely Puzzling - Goetz Schwandtner's Puzzles

On this page some extremely puzzling objects are displayed. My private puzzle collection consisting of a wide range of three-dimensional puzzles, from industrial produced Rubik's Cube like puzzles to my custom builds, from production range craftsmen, and not to forget the Japanese Himitsu Bakos, including some exquisite works of the Karakuri Creation Group. Please note that you won't find any (standard) jigsaw

Puzzle Group: My Adventures in the Zoo of Burrs


This group page shows some burr puzzles with something special to them. Most of them look like [traditional 18 pieces burrs](#), but actually they are extra pieces are animal shaped and lend their names to the respective puzzles.

It all started with a puzzle created by Alfons Eyckmans: "Free the monkeys" contains two monkey shaped extra pieces. The following ones were also than the monkey pieces, and then a whole series containing several variations of hellhounds, the "Devil's Pets". This idea was adapted by a second de big snake in it. All these burrs so far have two things in common: Based on the traditional 18 pieces burrs scheme, and because the animal pieces ar the puzzle, not before. The latest invention in this group is a 12 piece burr containing a camel piece. The 12 piece burr shape has been used by Alfons in it and seems to offer a lot of room. Although the camel is quite big, it moves a lot during the solution.

In the following, I will review these "Animal Burrs", so beware: there may be some spoilers for the solution. For each puzzle, a picture of the animal piec is built into the burr. Click on these pictures for bigger versions.


These reviews are result of my recent solving of these puzzles. All disassembled without the help of Burr-Tools and all of them have been great fun to within the series. A big thanks to Alfons and Stephan for designing these puzzles.

Free the Monkeys




The first two pieces come out easily, then the fun starts: Some interesting moves for removal of piece 3 and 4 — and the first monkey to come out ensures that you found these moves, you will see that the pieces seem to have been designed for

Save the Gorilla



This one has nice repeating and not too difficult move patterns for removal of p you have to return to nearly the start and find some lateral and group moves to re

Devil's Pet 1



The solution starts off with a nice long sequence to remove the first piece, with Pets 3 and 4. While piece 2 is quite easy, the third piece requires some interestin to "entangle" with some others — while even moving more pieces simultaneous would like to solve Devil's Pets 1, 3, and 4.

Navigation Menu:

- Overview pages:
- Puzzles
- Packing Puzzles
- Puzzle Boxes
- Other Puzzles
- Interlocking Explorer

Some special groups:

- n-ary Puzzles
- Twisty Octahedra
- 18pcs Burrs
- Burr Zoo
- Game Craze

Feature:

- Compendium of Chinese-Rings-Like Puzzles

Thank you for attending my talk!