

## **Dinosaur Philately: A new way to popularise the Mesozoic marvels.**

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Stamps have had a long and storied association with Natural History, particularly the study of large vertebrate megafauna. The practice of depicting animals in stamps was already well-established since the mid-19<sup>th</sup> century, beginning with the portrayal of heraldic devices and insigniae from various countries and states (one of the earliest examples being the bears from the Great Seal of Missouri). In 1851, the Canadian post office issued its first stamp, which depicted the Beaver (*Castor canadensis*)- it's national animal. By the mid-20<sup>th</sup> century, stamps depicting charismatic fauna from their countries of origin, as well as taxa that were well-known or studied worldwide had become commonplace. These wildlife stamps have helped educate people on animals and endangered species, with bodies like the World Wildlife Fund (WWF) partnering with different countries to issue stamps depicting animals of specific interest in the fields of conservation and wildlife studies.

Given the ubiquity of stamps in modern life, their widespread appeal to collectors and the general public, and of course their potential as a medium of education, it was no surprise that by the mid-20<sup>th</sup> century, stamps had begun to be seen as an excellent form of promotion for fossils and palaeontology. The USSR in 1947 released the first stamps to feature palaeontologists, followed by the Germans and other countries. Stamps depicting actual fossil fauna were issued from 1949 onwards, the very first fossil animal to be depicted on a stamp being a painting of *Bos primigenius* from the Lascaux caves, albeit as a celebration of the cave site rather than of the animal itself. India released its first 'fossil stamp' in 1951, depicting fossil elephants and commemorating the 100<sup>th</sup> anniversary of the Geological Survey of India. Over time, over 4000 stamps featuring some aspect of Natural History or Palaeontology have been issued by more than 200 countries around the world, featuring not only fossils but also famous palaeontologists, museums, and sites of interest (Lipps et al 2022).

Since then, a wide variety of fossil specimens have been depicted on stamps and continue to be a popular aspect of the hobby among both philatelists and hobby collectors alike. Given the low cost and ease of collection, stamps have the potential to be one of the most effective means of education through collections, classroom activities, exhibits, and so on. The scientific accuracy

of most depictions of fossil life on stamps is also generally high, at least at the time of issue of the stamp.

The present work attempts an overview of the history of depicting one of the most popular groups within the animal kingdom – dinosaurs - in fossil stamps, including the cultural, historic, and economic significance of such depictions.

Perhaps, no other group of animals captures the little boy's imagination more than dinosaurs. Almost every kid is fascinated by dinosaurs; the jaw-dropping, awe-inspiring, majestic skeleton of the elegant *Tyrannosaurus rex* or the towering *Brachiosaurus* mounted in life-size pose in the museum hall are indeed sights to behold. With their debut on our planet during the Late Triassic through the Jurassic to the very end of the Cretaceous Period, dinosaurs were truly the Mesozoic marvels and the dominant forms of life during this “Age of Reptiles”.

Ever since the 19<sup>th</sup> century, when the British comparative anatomist and biologist Sir Richard Owen first coined the term ‘Dinosauria’ (meaning ‘terrible lizards’), an erroneous image of dinosaurs being the typical dim-witted cold-blooded animals prevailed right up until the latter part of the twentieth century. However, research from the late 1970's onwards has shown that dinosaurs were metabolically active and the debate as to whether they were ectothermic (cold-blooded) or endothermic homeotherms (warm-blooded animals capable of maintaining a stable, internal body temperature) or ‘mesotherms’ (having a lower metabolism compared to mammals and birds but elevated than that of other reptiles) has yielded fascinating results, using state-of-the-art cutting-edge technology.



**The First Philatelic item on dinosaur:** *In the nineteen thirties, the Sinclair company used this meter franking to advertise their motor oil (Noad, 2018).*

*This apparently very rare item is probably the very first occurrence of a dinosaur in philately.*



**This American FDC** was issued on 10<sup>th</sup> August 1946. On this date, a stamp was issued to celebrate the centenary of Smithsonian Institute. The stamp itself shows Smithsonian's buildings in Washington, but illustration on left side of FDC shows a sauropod, most likely *Diplodocus*.



**The First stamp on dinosaur:** Though the first stamp on prehistoric life (*Stegodon ganesa*) was issued by India in 1951, the first stamp depicting dinosaur was issued by China in 1958, showing the prosauropod dinosaur *Lufengosaurus* (reptile from Lu-feng, from Triassic rocks).

In 1993, came Steven Spielberg's *Jurassic Park*, one of the highest-grossing films of all time, based on Michael Crichton's book of the same name. Whilst also being entertained by the popular portrayal of dinosaurs in merchandises available world-over from post cards, magnets, rubber and plastic figurines, collectibles etc., *Jurassic Park* was a kick-starter for dinosaur enthusiasm amongst children and adults alike. The spirit of that enthusiasm is continued in the present article by creating various unnatural groups of dinosaurs, supplemented by a pictorial representation through stamps issued by countries world over – a complementary to the dinosaur systematics done in academic papers.

Till date about 5000 stamps are issued on fossils, out of which about 4000 are on dinosaurs.

Several papers have been published over the years on dinosaur philately, most notably by Noad (2018, 2019, 2020) and Cohen (2019). To engage the enthusiast in presenting the different groups, this article has divided them into several unnatural groups, based on various criteria (see subheadings below) whilst still generally adhering to Seeley's 1888 classification of dinosaurs into the bird-hipped (ornithischian) and lizard-hipped (saurischian) groups (although recent studies have challenged this traditional classification – see Baron et al., 2017). The different

unnatural groups presented here include only those dinosaurs for which stamps have been issued by different countries and which were available on [www.stampedout.nl](http://www.stampedout.nl). Since the collection of stamps (and the consequent unnatural groups presented here) is exhaustive, this article will be released in at least two (if not three) parts. This first part includes the first of many criteria for the unnatural grouping of dinosaurs, namely their grouping based on possessing generic names after people. The description for each taxon is supplemented with a sentence or two about the dinosaur and its fossil distribution along with the country (or countries) that issued its stamps. As will be seen, many countries have issued stamps of dinosaurs even though they lack the fossils of that particular taxon. The authors hope that this would be a fun, interactive way to introduce the concept of dinosaurs to emerging, young enthusiasts and also an informative source for anyone interested in dinosaur philately.

## **A: Dinosaurs named after people.**

### **A.1: Dinosaurs with genus named after people.**

1) *Abelisaurus* Bonaparte and Novas, 1985. Figure 1. This South American genus of abelisaurid theropod dinosaurs lived during the Campanian stage of the Late Cretaceous Period (Campanian) of South America. The fossil, a partial skull was uncovered in 1985 in the Comahue region of Argentina. The generic name honours former director of the provincial Museum of Cipolletti in Argentina, Roberto Abel, the man who discovered the type specimen. Fossils of *Abelisaurus* have been found in Patagonia in South America.

Although its fossils are South American in distribution, several countries have also issued the stamps of *Abelisaurus*.

The stamps for *Abelisaurus* were issued by Mozambique (2007); Guinea (2008); Serbia (2009); Solomon Islands (2016); Central African Republic (2020); Niger (2021).

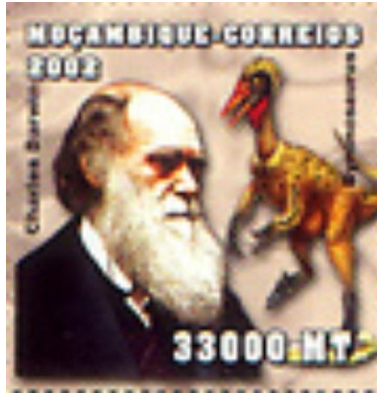


**Figure 1:** *Abelisaurus*



2) *Byronosaurus* Norell, Makovicky & Clark, 2000. Figure 2. This is a genus of a troodontid, maniraptoran theropod, whose fossils are known from the Late Cretaceous (Campanian) Djadochta Formation of Ukhaa Tolgod (Gobi Desert, Mongolia). The generic name honours Byron Jaffe, “in recognition of his family’s support for the Mongolian Academy of Sciences – American Museum of Natural History Palaeontological Expeditions”.

The stamp for *Byronosaurus* was issued by Mozambique (2003).



**Figure 2:** *Byronosaurus*.

3) *Liliensternus* Huene, 1934. Figure 3. This is a genus of a basal, neotheropod coelophysoid dinosaur that lived during the upper Triassic Trossingen Formation of Germany. The generic name honours the family name of count, amateur palaeontologist and medical doctor, Hugo Ruhle von Lilienstern, for his contributions to German palaeontology and founding a palaeontological museum in his castle in Bedheim, Germany.

Despite being discovered in Germany, the only stamp for this dinosaur was issued by Central Africa.

The stamp for *Liliensternus* was issued by Sao Tome and Principe (2014).



**Figure 3:** *Liliensternus*.

4) *Piatnitzkysaurus* Bonaparte, 1979. Figure 4. This is a genus of megalosaurid theropod dinosaur whose fossils are found in the lower Jurassic Canadon Asfalto Formation of South America (Argentina). The generic name honours the Russian-born Argentine geologist, Alejandro Matveievich Piatnitzky.

Despite being discovered in Argentina, the only stamp for this dinosaur was issued by Maldives.

The stamp for *Piatnitzkysaurus* was issued by Maldives (1994). The generic name is misspelled on the stamp.



**Figure 4:** *Piatnitzkysaurus*.

5) *Piveteausaurus* Taquet & Welles, 1977. Figure 5. This is a genus of a megalosaurid theropod dinosaur, known from a partial skull from the Middle Jurassic Dives Formation of Calvados (northern France). The generic name honours French palaeontologists, Jean Piveteau, who first described the partial braincase in 1923, which later became the type specimen for this dinosaur.

Despite being discovered in France, the only stamp for this dinosaur was issued by Solomon Islands.

The stamp for *Piveteausaurus* was issued by Solomon Islands (2014).



**Figure 5:** *Piveteausaurus*.

6) *Agustinia* Bonaparte, 1999. Figure 6. This is a genus of macronarian sauropod dinosaur, from the Early Cretaceous Lohan Cura Formation of Nequen Province of South America (Argentina). The generic name honours the discoverer of the specimen, Agustin Martinelli.

Despite being discovered in Argentina, the stamps for this dinosaur were issued by other countries, and not Argentina.

The stamps for *Agustinia* were issued by Palau (2014); Sao Tom E Principe (2019).



**Figure 6:** *Agustinia*.

7) *Bonatitan* Martinelli & Forasiepi, 2004. Figure 7. This is a genus of a titanosaurian macronarian sauropod from the Late Cretaceous Allen Formation of South America (Argentina). The generic name honours Argentine palaeontologist, Jose Fernando Bonaparte.

The stamp for *Bonatitan* was issued by Argentina (2012).



**Figure 7:** *Bonatitan*.

8) *Timimus* Rich & Vickers-Rich, 1993. Figure 8. This is a genus known from very partial remains from the Early Cretaceous of the Lake Copco quarry in Australia. Its classification remains uncertain. At first, it was considered an ornithomimosaur, and it is reconstructed as such on the stamps. After additional finds and further study, it was transferred to the Tyrannosauroidae. The generic name honours two people – the son of the discoverers, Timothy Rich and palaeontologist Tim Flannery.

Apart from Australia, Niger has also issued the stamps of this dinosaur.

The stamps for *Timimus* were issued by Australia (1993, 2013); Niger (2017 - featuring the same image as the 2013 Australian stamp).



**Figure 8:** *Timimus*.

9) *Zhenyuanlong* Lu & Brusatte, 2015. Figure 9. This is a genus of a dromaeosaurid theropod dinosaur from the Early Cretaceous (Aptian age) of the Yixian Formation of Liaoning, China. The generic name honours Zhenyan Sun, a representative of the Jinzhou Palaeontological Museum.

Despite being discovered in China, the stamps for this dinosaur were issued by other countries, and not China.

The stamps for *Zhenyuanlong* were issued by Central African Republic (2020); Sierra Leone (2020).





**Figure 9:** *Zhenyuanlong*.

10) *Puertasaurus* Novas et al., 2005. Figure 10. This is a genus of a titanosaurian macronarian sauropod dinosaur from the Late Cretaceous of the Cerro Fortaleza Formation in southwestern Patagonia, Argentina (South America). The generic name honours Pablo Puerta, one of the two discoverers/preparators of the specimen.

Despite being discovered in Argentina, the stamps for this dinosaur were issued by other countries, and not Argentina.

The stamps for *Puertasaurus* were issued by Solomon Islands (2014); Guinea-Bissau (2018).



**Figure 10:** *Puertasaurus*.

11) *Gastonia* Kirkland, 1998. Figure 11. This is a genus of nodosaurid ankylosaurian dinosaur from the Early Cretaceous of the Cedar Mountain Formation in Grand County, Utah (North America). The generic name honours U.S. palaeontologist and CEO of Gaston Design Inc., Robert Gaston.

Despite being discovered in the U.S., the stamps for this dinosaur were issued by other countries, and not the U.S.

The stamps for *Gastonia* were issued by Papua New Guinea (2004); Togo (2015); Niger (2016); Solomon Islands (2016).



**Figure 11:** *Gastonia*.

12) *Gasparinisaura* Coria & Salgado, 1996. Figure 12. This is a genus of an ornithomimid dinosaur from the Late Cretaceous (early Campanian) of the Anacleto Formation of Argentina (South America). The generic name honours Argentine palaeontologist, Zulma Brandoni de Gasparini.

The stamp for *Gasparinisaura* was issued by Argentina (1998).



**Figure 12:** *Gasparinisaura*.

13) *Lambeosaurus* Parks, 1923. Figure 13. This is a genus of a duck-billed/hadrosaurid dinosaur from the Late Cretaceous (Late Campanian) of North America. Various species were distributed across Canada, the United States and Mexico. The generic name honours the Canadian geologist and palaeontologist, Lawrence Morris Lambe, who first described some material relevant to the genus in 1902.

The stamps for *Lambeosaurus* were issued by Grenada (1994); Tanzania (1994, 1999); Ghana (1995, 1999); United States of America (1997); Uganda (1998); Madagascar (1998); Sierra Leone (1998); Zambia (1999); Grenada-Grenadines (1999); Guinea (1999); Sint Vincent and the Grenadines (2001); Mozambique (2002, 2018, 2020); Solomon Islands (2016); Djibouti (2017); Central African Republic (2018, 2019); Guinea-Bissau (2019); Sao Tome E Principe (2019);.





**Figure 13:** *Lambeosaurus*.

*Remarks:* The title on the Central African Republic, 2018 sheet is incorrect; the French for dinosaurs is ‘Dinosaures’. *Lambeosaurus* on the Grenada-Grenadines, 1999 sheet is actually *Corythosaurus*. The reconstruction of *Lambeosaurus* on Tanzania, 1994 sheet is outdated. The reconstruction on Tanzania, 1999 sheets is more like *Corythosaurus*.



14) *Leaellynasaura* Rich and Rich, 1989. Figure 14. This is a genus of a small, herbivorous ornithomimid dinosaurs from the Albian stage (Early Cretaceous) of Dinosaur Cove region, Australia. The generic name honours Leaellyn Rich, the daughter of the Australian palaeontologist couple Tom Rich and Patricia Vickers-Rich, who discovered it.

Despite being discovered in Australia, the stamps for *Leaellynasaura* were also depicted on stamps issued by other countries.

The stamps for *Leaellynasaura* were issued by Australia (1993); Guyana (1993); Lesotho (1998); Maldives (1999).



**Figure 14:** *Leaellynasaura*.

*Remarks.* *Leaellynasaura* is misspelled as ‘*Leaellynasaurs*’ on Guyana, 1993 sheet.

15) *Parksosaurus* Sternberg, 1937. This is a genus of a neornithischian dinosaur from the early Maastrichtian age (Upper Cretaceous) Horseshoe Canyon Formation, Alberta (Canada). The generic name honours William Parks, a Canadian geologist and paleontologist, following in the tradition of Lawrence Lambe.

Despite being found in Canada, the stamps of *Parksosaurus* have been issued by other countries and not Canada.

The stamps for *Parksosaurus* were issued by Maldives (1994); Guinea-Bissau (2008); Mozambique (2014); Sierra Leone (2017).



**Figure 15:** *Parksosaurus*.

Remarks. *Parksosaurus* is misspelled '*Parkosaurus*' on Maldives, 1994 sheet.

16) *Avaceratops* Dodson, 1986. This is a genus of a small, herbivorous ceratopsian dinosaur from the late Campanian stage (Late Cretaceous) of the Judith River Formation of Montana, Northwest United States. The generic name honours Ava Cole, the wife of fossil dealer Eddie Cole who found its first remains.

Despite being found in Canada, Solomon Islands has issued the stamps of *Avaceratops* and none have been issued by Canada.

The stamp for *Avaceratops* was issued by Solomon Islands (2015).



**Figure 16:** *Avaceratops*.

17) *Fabrosaurus* Ginsburg, 1964. This is a genus of an ornithischian dinosaur from the Early Jurassic of the Elliot Formation, Lesotho (Southern Africa). The generic name honours Jean Fabe, a French geologist, involved in the collection of the fossil.

The stamps for *Fabrosaurus* were issued by Gambia (1992); Transkei (1993).



**Figure 17:** *Fabrosaurus*.

## References.

Baron, M.G., Norman, D.B. and Barrett, P.M., 2017. A new hypothesis of dinosaur relationships and early dinosaur evolution. *Nature*, 543(7646), pp.501-506.

Cohen, J.I., 2019. Tyrannosaurus rex: on Our Stamps and on Our Mind. *The American philatelist*.

Noad, J., 2018. Diamond Dinoversary. *Prehistoric Times* (125).

[www.stampedout.nl](http://www.stampedout.nl)

Noad, J., 2019. Disco-saur Stamps of the Early Seventies. *Prehistoric Times* (128).

Noad, J., 2020. Dinosaurs Stamping in the Seventies. *Prehistoric Times* (133).

Lipps, J.H., Vartak, A., Van Eijden, T., Rajshekhar, C., Vaddadi, S. and Vartak, R., 2022. Paleontological postage stamps in art and education.