



Comment on “An Indication of Intentional Efforts to Cause Global Warming and Glacier Melting” by J. Marvin Herndon

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Author's contribution

The sole author designed, analyzed and interpreted and prepared the manuscript.

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Commentary

ABSTRACT

Aims: This is a critical comment on the recently published paper by Herndon (JGEESI 9(1): 1-11, 2017). I present compelling findings that Herndon's main claim that the "air-drop material" found on February 14, 2016 in Harrison Township, Michigan (USA) is an evidence for a deliberate world-wide effort to cause global warming and glacier melting is misleading.

Analysis: The Michigan Department of Environmental Quality has determined that the found "air-drop material" was consistent with bird droppings because it morphologically resembles plant material, including leaves, seeds and fruit skins from berries. The 127th Wing, Michigan Air National Guard also stated that there was no indication that the substance came from any type of military aircraft.

Conclusion: Although the above relevant information about the Harrison Township event was already known since late February 2016, it is concealed in Herndon's paper. Indeed, the climate of

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Michigan is optimal to grow blueberry and other winter berries and these are usual winter food for local birds. Herndon missed to properly investigate the more likely possibility that the air-drop material could simple be unusual bird scat.

Keywords: Air-drop material; analysis of the evidences; scientific method; Harrison township.

1. INTRODUCTION

Herndon [1] has recently published a paper arguing that the black “air-drop material” found on February 14, 2016 upon a number of residences and vehicles in Harrison Township, Michigan (USA) (see Fig. 1) was evidence for a deliberate world wide effort to hasten a melting of glaciers and thereby hasten global warming. Indeed, the investigated “air-drop material” resembles to some extent natural cryoconite, whose dark gray color absorbs sunlight. If sprayed above snow and ice, black material could accelerate melting. If similar dark substances were released in large quantities worldwide and above glaciers, they could hasten their melting and thereby hasten global warming by albedo reduction.

As one of the referee of Herndon’s paper, I have argued that Herndon’s evidences were too slim, that the paper had to be rewritten to focus only on the event occurred in Harrison Township on that day and that the title too had to be substituted with a more objective one [2]. My suggestions were not followed by the author. Now, I have collected new evidences that seriously question Herndon’s interpretation of his findings, which would support my initial doubts about that paper. The information I am going to provide is relevant for correctly interpreting the episode. Yet, despite its already availability in the news-media, this information is concealed in Herndon’s paper. Thus, I think that the Herndon’s claim is scientifically unsound.

2. EVIDENCES COLLECTED BY LOCAL NEWS-AGENCIES

As revealed in the local news (e.g.: FOX 2 - Detroit [3]), just a few days after the mysterious event that has seen some material air-dropping on February 14, 2016 in Harrison Township, Michigan (USA), the Michigan Department of Environmental Quality (MDEQ) stepped in the case because alerted by local residents. MDEQ tested the sample and on February 23, 2016 it determined that it was very likely bird scat. In fact, in an email to the Detroit Free Press (on February, 23, 2016), the MDEQ stated that “...material that morphologically resembles plant

material, including leaves, seeds and fruit skins make up the majority of the sample. The sample is consistent with bird scat containing fruit remains” [4]. “(The substance) is pretty natural,” added Chris Ethridge, Southeast Michigan District Supervisor for Air Quality Division for the MDEQ [5].

It is true that at the beginning the event alarmed the residents. In fact, as Amy Lange of FOX 2 reported, although local residents too had originally thought that the “air-drop material” was bird droppings, that material did not appear so after some kind of “scraping”. It appeared very black and unusual, as Fig. 1 shows. This was also confirmed by the local Harrison Township Fire chief who came out to investigate the case but could not determine what that dark material was, either [6].

As it was reported in an ABC video-news, on February 16, 2016 some residents were very alarmed because they sincerely thought that the material could be some type of mysterious oil dropped by airplanes, especially since Harrison Township is just a few miles from the Selfridge Air National Guard Base. However, on February 17, 2016, the Detroit Free Press [7] also reported that the 127th Wing conducted a review of aircraft traffic in and out of Selfridge in the four days leading up to and including Monday 15 February, when the residents first noticed the substance. Based on the reviews, the base said in the news release, there is no indication that the substance came from any type of military aircraft [7].

Thus, the Harrison Township “mystery” was sufficiently solved according to local authorities since February 23, 2016.

3. RESULTS AND DISCUSSION

Herndon [1] insinuates that the mysterious material was some kind of harmful substance dropped by airplanes. However, the alternative and more likely hypothesis that the analyzed “air-drop material” could simply be bird droppings had to be first acknowledged and then more properly investigated if Herndon wanted to go beyond it and question it. This is a basic requirement of the scientific method and of the

Occam's Razor. The latter is a general principle stating that "Entities should not be multiplied unnecessarily," which essentially means that "when you have two competing theories that make exactly the same predictions, the simpler one is the better".

Normal bird droppings consists of three parts: feces that could be from green to black according to the diet, white urates and clear and watery urine [8]. The unusual black color of the analyzed material, versus the more common green-brown-white bird scat, could be caused by birds eating of specific winter berries under specific winter dry weather conditions. In fact, on February 14, 2016 the weather in Harrison Township, Michigan (USA) was freezing as the snow in Fig. 1 shows. The temperature varied from a minimum of -2°F to a maximum of 19°F [9]. Birds could have eaten and poorly digested nearly frozen berry.

In fact, the magnified photos of the material collected in Fig. 1 do suggest that, although the black color is unusual, the berry shape of the material, which is very evident in the lower photographs, indicates that it is made of seeds and fruit skins from berries.

It is to be noted that in North America a number of berry species last a long time on the plants

and provide nutrition and moisture for birds in winter [10]. These plants include the American cranberry viburnum, the staghorn sumac, the winterberry, the crabapple, the beautyberry, the pagoda dogwood, the nannyberry, the heavenly bamboo and many other species [11]. Michigan, in particular, has an optimal climate to grow commercial winter berry and several blueberry farms are present also in the countryside surrounding Harrison Township, which is located in the north periphery of Detroit on Lake St. Clair. This town is bordered North and West by an extended rural area.

Northern highbush (*Vaccinium corymbosum*) and northern low-bush blueberries (*Vaccinium angustifolium*) are typical North American species of blueberry which has become a food crop of significant economic importance. The highbush variety is hardy in U.S. Department of Agriculture plant hardiness zones 3 through 7 while the low-bush variety is hardy in zones 2 through 7 [12]. The US hardiness map shown in Fig. 2 [13], which is used to classify areas of distinct climatic conditions for agricultural purpose, confirms that the climate in Michigan is characterized by zone 4 through 6, which are optimal to grow winter berry.



Fig. 1. The “air-drop material” found on February 14, 2016 in Harrison Township, Michigan (USA). The photographs are from local News-Agencies. Although the black color is unusual, the berry shape of the material suggests that it is made of seeds and fruit skins from common berries as the MDEQ’s analysis concluded



Fig. 2. US hardiness zone map used for agricultural purposes, and the location of Harrison Township in Michigan (USA), which is in zone 5 [13]

4. CONCLUSION

Herndon’s insinuation that the mysterious air-dropped material fallen on February 14, 2016 upon a number of residences and vehicles in Harrison Township, Michigan (USA) was some kind of harmful airplane dropping and that this event could be interpreted as a deliberate world-wide effort to cause global warming and glacier melting is unsubstantiated. It appears to run contrary to both the scientific method and the Occam’s Razor principle.

Herndon acknowledges in page 4 of Ref. [1] that the Michigan Department of Environmental Quality noted from microscopic examination “... consists of a mixture of particles in dark clumps ... that morphologically resembles plant material, including leaves, seeds and fruit skins make up the majority of the sample...”. Yet, Herndon [1] misquoted the report by cutting the conclusion, namely he did not properly acknowledge the MDEQ’s finding that the material was indeed bird droppings. This additional information is, however, fundamental for a reader to properly evaluate the reliability of Herndon’s main claim about an intentional effort to cause global warming and glacier melting. This information is missing in [1] although it has been already reported by news-agencies, as proven above.

Thus, Herndon has likely written a quite misleading article by interpreting an unusual but

natural event, which simply occurred once in a limited area, as an evidence for a deliberate world wide effort to cause global warming and glacier melting. Herndon’s conclusions are unsubstantiated in front of the full evidences provided by MDEQ and by the local aeronautical authorities.

In conclusion, all evidences collected by local authorities and also a simple visual photo inspection (Fig. 1) and the general agricultural and wildlife characterization of Michigan (Fig. 2) infer that the “air-drop material” found on February 14, 2016 upon a number of residences and vehicles in Harrison Township, Michigan (USA) is bird droppings. If Herndon wanted to question this conclusion, nevertheless he had a duty to clearly acknowledge it and clearly present the counter evidences to dispute it.

COMPETING INTERESTS

Author has declared that no competing interests exist.

REFERENCES

1. Herndon JM. An indication of intentional efforts to cause global warming and glacier melting. Journal of Geography, Environment and Earth Science International. 2017;9(1):1-11. Article no. JGEESI.30834

2. Scafetta N. Reviewer's comment. Available:http://www.sdiarticle2.org/prh/JGEESI_42/2017/Rev_JGEESI_30834_Nic.pdf,
http://www.sdiarticle2.org/prh/JGEESI_42/2017/Rev_JGEESI_30834_Nic_v1.pdf
3. Fox2-Detroit News. Mystery solved! Mysterious droppings from sky in Harrison Twp. was bird scat. Available:<http://www.fox2detroit.com/news/local-news/95521324-story>
4. Detroit Free Press. Oh, poop! Stuff found near Selfridge is bird droppings. Available:<http://www.freep.com/story/news/local/michigan/macomb/2016/02/23/bird-poop-harrison-substance-selfridge/80812290/>
5. Macomb Daily News. Mystery substance that fell from the sky identified in Harrison Township. Available:<http://www.macombdaily.com/article/MD/20160223/NEWS/160229856>
6. Mysterious substance coats homes in Harrison Township. Available:https://www.youtube.com/watch?v=MDn0TbS_Lx8
7. Detroit Free Press. Oily gunk not from military aircraft, Selfridge says. Available:<http://www.freep.com/story/news/local/michigan/macomb/2016/02/17/harrison-township-gunk-selfridge-aircraft/80517068/>
8. Russo S. Droppings, the inside story. Available:<http://www.justcockatiels.net/droppings.html>
9. Weather conditions in Harrison Township on February 14; 2016. From Accuweather web-site: <http://www.accuweather.com/en/us/harrison-charter-township-mi/48045/month/938?monyr=2/01/2016>
10. Crain R. Winter berries for winter birds. Available:<http://content.yardmap.org/learn/winter-berries/>
11. Ross M, Hancock JW. The best berry plants for birds. Available:<http://www.bhg.com/gardening/design/nature-lovers/best-berry-plants-for-birds/>
12. Climate for Blueberry plants. Available:<http://homeguides.sfgate.com/climate-blueberry-plants-51966.html>
13. Maps for Growing Zones from the USDA. Available:<https://www.thespruce.com/maps-for-growing-zones-from-the-usda-2132409>

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