Haughton-Mars Project
Project Summary

The Haughton-Mars Project (HMP) on Devon Island is an ongoing international research project with three main goals:

A) Space Science: To advance our knowledge of planets (Earth, Moon, Mars, and beyond) through comparative studies & to investigate Life in extreme environments;

B) Space Exploration: To prepare for future space and planetary exploration with robots and humans, including testing future Mars rovers and supporting astronaut training.

C) To share with the public the excitement of space science and exploration.

Haughton Crater and surrounding terrain on Devon Island are of great scientific value for Earth, Space and Life Sciences Research. The site presents many exceptional attributes not found elsewhere on Earth, in particular the presence of a large, well-preserved meteorite impact crater and other unique terrain features similar to the Moon or Mars. Devon Island has been used by the Haughton-Mars Project (HMP) for this type of research since the project began in 1997. The base camp for this project is called the Haughton-Mars Project Research Station or HMP RS.

Current plans of government space agencies around the world include the possibility of sending humans to the Moon by 2017-2025 and on to Mars in 2025-2035. The Haughton-Mars Project plans to continue conducting research to help achieve these goals and also possibly the next steps beyond. It is anticipated that the HMP RS will continue to be operated in support of these endeavors until at least 2017 and possibly beyond.

Activities on the HMP include: a) the scientific study of Haughton Crater and surrounding terrain (the history of water and the adaptations of microbial life to extreme environments); b) the testing and validation of new technologies and approaches for space exploration, including rovers, habitats, tools and instruments; c) education and public outreach activities.

The Haughton-Mars Project plans to continue consulting closely with, and to grow existing collaborations with, interested local communities in Nunavut, in particular the communities of Grise Fiord and Resolute Bay. The HMP is committed to preserving the site’s exceptional value for future generations, in particular by minimizing any environmental impact in the area. The HMP is also committed to helping communities derive meaningful economic benefits from the project’s presence. It is the intention of the HMP to continue engaging local communities as direct partners and participants in the project.

With the help of local communities, it is anticipated that the HMP will remain the world’s leading research project in planetary analog studies, and that the HMP RS will remain a first-class research facility where participants from around the world, from students to astronauts, can come advance the peaceful exploration of space and of our own planet.

Acknowledgements: The HMP is managed jointly by the Mars Institute and the SETI Institute. Support for research comes mainly from NASA and the Canadian Space Agency. The communities of Grise Fiord and Resolute Bay are warmly thanked for their support and participation over the years.

For more information, please visit: www.marsonearth.org or write to Dr. Pascal Lee, HMP Project Lead, at: pascal.lee@marsinstitute.info

Haughton-Mars ᐱᓕᕆᐊᖅ
ᐱᓕᕆᐊᒧᑦ ᓇᓗᓇᐃᔭᖅᓯᒪᓂᖏᑦ

Haughton-Mars ᐱᓕᕆᐊᖅ (HMP) Devon Island-ᒥᑦ ᑲᔪᓯᕙᓪᓕᐊᔪᖅ ᓯᓚᕐᔪᐊᒥ ᖃᐅᔨᓴᓂᕐᒧᑦ ᐱᓕᕆᐊᖅ ᐱᖓᓱᓂᑦ ᑐᕌᖃᓗᐊᖅᑐᓂ:
A) ᓯᓚᐃᓐᓇᕐᒥᑦ ᖃᐅᔨᓴᕐᓂᖅ: ᓱᕗᒧᒋᐊᕐᓗᒋ ᖃᐅᔨᒪᓂᕆᔭᕗᑦ ᓄᓇᕐᔪᐊᓂᑦ (ᓯᓚᕐᔪᐊᖅ, ᑕᖅᑭᖅ, ᒫᔅ ᐅᖓᑖᓄᓪᓗ) ᖃᐅᔨᓴᕐᓂᒃᑯᑦ ᐊᒻᒪ ᖃᐅᔨᓴᕐᓗᓂ ᐆᒪᔪᓂ ᓯᓚᑲᓪᒪᓃᑦᑐᓂᑦ;
B) ᓯᓚᐃᓐᓇᕐᒥᑦ ᖃᐅᔨᓴᕐᓂᖅ: ᐸᕐᓇᐸᓪᓕᐊᓗᓂ ᓱᕗᓂᒃᓴᒥ ᓯᓚᐃᓐᓇᕐᒥᑦ ᐊᒻᒪ ᓄᓇᕐᔪᐊᓂ ᖃᐅᔨᓴᕐᓂᖅ ᐊᐅᓚᐅᑎᓅᖅᑐᓂᑦ ᐊᒻᒪ ᐃᓄᓐᓂᑦ, ᐱᖅᑲᓯᐅᑎᓗᓂ ᖃᐅᔨᓴᕐᓂᖅ ᓱᕗᓂᒃᓴᒥ ᒫᔅᓯᒥ ᐃᖏᕐᕋᔪᑦ ᐊᒻᒪ ᐃᑲᔪᕐᓂᖃᖅᑐᑦ ᓯᓚᐃᓐᓇᕐᒧᖃᑦᑕᖅᑐᓂᑦ ᐃᓕᓐᓂᐊᑎᑦᑎᓂᕐᒧᑦ.
C) ᑕᐅᖅᓰᖃᑎᒋᓗᒋ ᐃᓄᐃᑦ ᖃᐅᔨᔪᒥᓇᕐᓂᖓ ᓯᓇᐃᓐᓇᕐᒥ ᖃᐅᔨᓴᓂᕐᒥᑦ ᐊᒻᒪ ᕿᒥᕈᓂᕐᒥᑦ.

Haughton Crater ᐊᒻᒪ ᖃᓂᒋᔭᖓᓂ ᓄᓇᒥ Devon Island-ᒥᑦ ᖃᐅᔨᓴᕐᓴᒃᓴᑦᑎᐊᕙᐃᑦ ᓯᓚᕐᔪᐊᒥ, ᓯᓚᐃᓐᓇᕐᒥ ᐊᒻᒪ ᐆᒪᔪᓂ ᖃᐅᔨᓴᓂᕐᒥᑦ. ᓄᓇᐅᔪᖅ ᐊᒥᓱᓂᑦ ᓈᒻᒪᑦᑐᓂᑦ ᐱᐅᔪᓂᑦ ᐊᓯᖏᓐᓂ ᓯᓚᕐᔪᐊᒥ ᓇᓂᔭᐅᔪᓐᓇᖏᑦᑐᑦ, ᐱᓗᐊᖅᑐᒥ ᐱᑕᖃᕐᓂᖓ ᐊᖏᔪᒥ, ᐱᐅᔪᒥᑦ ᓯᓇᐃᓐᓇᒦᙵᖅᑐᒧᑦ ᐅᔭᕋᒧᑦ ᑐᒃᑮᐅᓚᐅᖅᓯᒪᔪᒥ (ᓇᖅᓴᖅ) ᐊᒻᒪ ᐊᓯᖏᑦ ᐊᔾᔨᐅᖏᑦᑐᑦ ᓄᓇᐃᑦ ᐊᔾᔨᒋᐸᓗᑦᑕᖏᑦ ᑕᖅᑭᒥᑦ ᐊᒻᒪ ᒫᔅᓯᒥ. Devon Island ᐊᑐᖅᑕᐅᖃᑦᑕᖅᓯᒪᔪᖅ Haughton-Mars ᐱᓕᕆᐊᒧᑦ (HMP) ᑕᐃᒪᐃᑦᑐᒧᑦ ᖃᐅᔨᓴᕐᓂᕐᒥᑦ ᐱᓕᕆᐊᖅ ᐱᒋᐊᓚᐅᖅᓯᒪᓂᖓᓂ 1997. ᑐᐱᕐᕕᒋᔭᖓ ᑖᒃᓱᒧᖓ ᐱᓕᕆᐊᒧᑦ ᑕᐃᔭᐅᔪᖅ Haughton-Mars ᐱᓕᕆᐊᒧᑦ ᖃᐅᔨᓴᕐᕕᒃ ᐅᑉᕙᓘᓐᓃᑦ HMP RS.

ᒫᓐᓇᐅᔪᒥ ᐸᕐᓇᑕᐅᓯᒪᔪᑦ ᒐᕙᒪᒃᑯᓐᓂ ᑎᒥᖁᑎᒋᔭᐅᔪᑦ ᓯᓚᐃᓐᓇᓕᕆᓂᕐᒧᑦ ᓯᓚᕐᔪᐊᒥ ᐱᖅᑲᓯᐅᑎᔪᑦ ᐊᐅᓪᓚᑎᑦᑎᔪᓐᓇᑐᐃᓐᓇᕆᐊᖃᓂᕐᒥᑦ ᐃᓄᓐᓂᑦ ᑕᖅᑭᒧᑦ 2017-2025 ᐊᒻᒪ ᒫᔅᓯᒧᑦ 2025-2035. Haughton-Mars ᐱᓕᕆᐊᖅ ᐸᕐᓇᓯᒪᔪᑦ ᑲᔪᓯᑎᑦᑎᓗᑎ ᖃᐅᔨᓴᓂᕐᒥᑦ ᐃᑲᔪᕐᓂᐊᖅᑐᑦ ᑎᑭᑎᑦᑎᓗᑎ ᑐᕌᒐᖏᓐᓂ ᐊᒻᒪ ᑭᖑᓪᓕᐅᔪᓐᓇᑐᐃᓐᓇᕆᐊᖃᖅᑐᒥᑦ. ᓂᕆᐅᒋᔭᐅᔪᖅ ᑖᓐᓇ HMP RS ᐊᐅᓚᑎᑕᐅᖏᓐᓇᓂᐊᖅᑐᖅ ᑖᒃᑯᓂᖓ ᐃᑲᔪᓱᕐᓗᑎ ᖃᓄᐃᓘᖅᑕᐅᔪᓂᑦ ᑎᑭᓪᓗᒍ 2017 ᐊᒻᒪᓗᖃᐃ ᐅᖓᑖᓄᑦ.

ᖃᓄᐃᓘᖅᑕᐅᓂᐊᖅᑐᑦ HMP-ᒥᑦ: a) ᖃᐅᔨᓴᕐᓂᖅ Haughton Crater ᐊᒻᒪ ᖃᓂᒋᔭᖓ ᓄᓇ (ᐃᒪᐅᑉ ᖃᓄᐃᓘᖃᑦᑕᕐᓂᖓ ᐊᒻᒪ ᐆᒪᔪᐃᑦ ᐃᓕᑦᑐᕈᓐᓇᕐᓂᖏᓐᓂ ᒥᑮᔪᑎᑦ ᐆᒪᔪᑦ ᓇᔪᖅᓴᒃᓴᐅᔫᔭᖏᑦᑐᒥᑦ); b) ᖃᐅᔨᓴᕐᓂᖅ ᐊᒻᒪ ᓇᓗᓇᐃᖅᓯᓂᖅ ᓄᑖᓂᑦ ᖃᐅᔨᒪᓂᐅᔪᓂᑦ ᐊᒻᒪ ᓯᓚᐃᓐᓇᕐᒧ ᖃᐅᔨᓴᕐᓂᐅᔪᒥᑦ, ᐱᖅᑲᓯᐅᑎᓗᑎ ᐃᖏᕐᕋᔪᑎ, ᓇᔪᖅᑕᐅᔪᑦ, ᓴᓇᕐᕈᑎ ᐊᒻᒪ ᓱᓇᒃᑯᑖᑦ; c) ᐃᓕᓐᓂᐊᕐᓂᖅ ᐊᒻᒪ ᐃᓄᓐᓂᑦ ᖃᐅᔨᑎᑦᑎᒋᐊᕐᓂᖅ.

Haughton-Mars ᐱᓕᕆᐊᖅ ᐸᕐᓇᐃᓯᒪᔪᑦ ᐅᖃᐅᔨᕆᐊᖃᑦᑕᕐᓗᑎ, ᐊᒻᒪ ᐱᕈᖅᑎᕆᐊᕐᓗᒋ ᐱᓕᕆᖅᑎᖏᑦ ᒫᓐᓇᐅᔪᒥ ᓄᓇᓖᑦ ᐱᔪᒪᓂᒃᑯᑦ ᓄᓇᕗᒻᒥ. ᐱᓗᐊᖅᑐᒥ ᓄᓇᓕᐅᔪᑦ ᐊᐅᔭᐃᑦᑐᖅ ᐊᒻᒪ ᖃᐅᓯᐃᑦᑐᖅ. HMP ᑲᔪᖏᖅᓯᒪᔪᑦ ᐱᐅᖅᓱᐊᓂᕐᒥᑦ ᓄᓇᐅᔪᒥ ᓱᕗᓂᒃᓴᒥ ᐊᑐᖅᑕᐅᔪᓐᓇᓂᐊᕐᒪᑦ, ᐱᓗᐊᖅᑐᒥᑦ ᐊᕙᑎᒧᑦ ᐊᑦᑐᑎᑦᑎᓗᐊᖏᓪᓗᑎ. HMP ᑲᔪᖏᖅᓯᒪᒻᒥᔪᖅᑕᐅᖅ ᐃᑲᔪᕐᓗᑎ ᓄᓇᓕᓐᓂᑦ ᑐᓂᓯᓗᑎ ᑮᓇᐅᔭᓕᕆᓂᑦᑎᒍᑦ ᐱᕙᓪᓕᐊᑎᑦᑎᓗᑎ ᐱᓕᕆᐊᒧᑦ ᐱᔾᔪᑕᐅᔪᓂᑦ. HMP ᑲᔪᓯᑎᑦᑎᓂᐊᖅᑐ ᐃᓚᐅᖃᑕᐅᓗᑎ ᓄᓇᓕᓐᓂᑦ ᐱᓕᕆᖃᑎᒋᓗᓂᒋᑦ ᐊᒻᒪ ᐃᓚᐅᖃᑕᐅᓗᑎ ᐱᓕᕆᐊᒥᑦ.

ᐃᑲᔪᖅᑕᐅᓗᑎ ᓄᓇᓕᐅᔪᓂᑦ, ᓂᕆᐅᒋᔭᐅᔪᖅ ᑖᓐᓇ HMP ᓯᕗᓕᖅᑎᐅᖏᓐᓇᓂᐊᖅᑐᑦ ᖃᐅᔨᓴᓂᕐᒧᑦ ᐱᓕᕆᐊᒥᑦ ᓄᓴᕐᔪᐊᓂ ᖃᐅᔨᓴᕐᓂᐅᔪᓂᑦ, ᐊᒻᒪ ᑖᓐᓇ HMP RS ᐱᐅᓛᖑᓗᓂ ᖃᐅᔨᓴᕐᕕᐅᓗᓂ ᐃᓚᐅᖃᑕᐅᔪᑦ ᓯᓚᕐᔪᐊᒦᖑᖅᑐᑦ, ᐃᓕᓐᓂᐊᖅᑎᓂᑦ ᓯᓚᐃᓐᓇᕐᒧᖃᑦᑕᖅᑐᓄᑦ, ᓱᕗᒧᐊᑦᑎᑦᑎᒍᓐᓇᖅᑐᑦ ᖃᓄᐃᓘᖅᒥᓪᓗᑎ ᖃᐅᔨᓴᕐᓗᑎ ᓯᓚᐃᓐᓇᕐᒥᑦ ᐊᒻᒪ ᓄᓇᕐᔪᐊᕆᔭᑦᑎᓐᓂ.

ᐃᓕᓴᕆᔭᐅᔪᑦ: HMP ᐊᐅᓚᑕᐅᔪᖅ Mars Institute ᐊᒻᒪ SETI Institute. ᐃᑲᔪᖅᓱᖅᑕᐅᕙᑦᑐᑦ NASA-ᑯᓐᓂ ᐊᒻᒪ ᑲᓇᑕᒥ ᓯᓚᐃᓐᓇᓂᐊᖅᑎᒃᑯᑦ. ᓄᓇᓕᐅᔪᑦ ᐊᐅᔭᐃᑦᑐᖅ ᐊᒻᒪ ᖃᐅᓯᐃᑦᑐᖅ ᖁᔭᓐᓇᒦᖅᑕᐅᔪᑦ ᐃᑲᔪᕈᓐᓇᕐᓂᖏᓐᓄᑦ ᐃᓚᐅᖃᑕᐅᓂᖏᓐᓄᓪᓗ ᐊᕐᖁᒍᓚᓚᐅᓕᖅᑐᓂᑦ.

ᑐᑭᓯᒋᐊᒃᑲᓐᓂᕈᒪᒍᕕᑦ, ᐅᕗᖓᕈᓐᓇᖅᑐᑎᑦ: www.marsonearth.org ᑎᑎᕋᕐᕕᒋ;ᒍᓘᓐᓃᑦ Dr. Pascal Lee, HMP ᐱᓕᕆᐊᒥᑦ ᑐᑭᒧᐊᖅᑎᑦᑎᔨ, s?i: pascal.lee@marsinstitute.info