



# One Giant Leap

By David Miessler-Kubaneck

Survivors of a crash landing on the moon must decide what they should do now for the good of tardigrade-kind. (Inspired by real-life events.)

## Requirements

**Players:** 3 to 6 playing the roles of surviving tardigrade specimens; all sharing facilitation

**Time:** Up to 2 hours

**Content Warning:** Possible harm or death in space

**Environment:** Try to create a space that feels like the moon. Quiet and able to support silence. Adjustable lighting. Wrap yourself in a blanket or otherwise to feel more tardigradian.

**Online:** If playing online, use webcams and a program that allows everyone to see everyone else, such as Zoom. If possible, once play begins use only light from the computer screens or dim lighting to emphasize lunar conditions. As appropriate, change the lighting to indicate if you are inside the crashed vehicle (dim), to underground (dark), to exposed on the moon (bright). Use proximity to the microphone and screen to exaggerate breathing and facial expressions, and the silence of space.

**Safety:** This game uses the following safety tools as described by Tracy Cooper:

“The participants are more important than the game. The participants’ needs should ALWAYS be the first priority, regardless of their impact on the game. If a player needs to leave for any reason, either for a quick break or permanently, they are welcome to do so.

“Participants are expected to use the following modified version of the OK Check-In procedure, a mechanic developed by New World Magischola. If a participant wishes to bring up a topic that they feel may be uncomfortable to other participants, or if they sense that other participants may be uncomfortable, they should make an “ok” hand signal by touching their thumb to their pointer finger and leaving their other fingers up. All other participants should respond with a thumbs up, meaning that they are comfortable with the content being addressed, a thumbs down, meaning that they are uncomfortable with the content being addressed, or a hand wiggle, meaning that they are slightly uncomfortable or unsure. If any participant gives a thumbs down, the topic should immediately be changed. If no participant gives a thumbs down but any participant gives a hand wiggle, participants should tone down the intensity of the topic at hand and move towards another topic, and should continue to utilize the OK Check-In to ensure the comfort of other participants. Participants are also encouraged to use the thumbs down or hand wiggle signals to express discomfort with the subject matter at any time, whether prompted or unprompted. Participants not using video may type “Ok?”, “thumbs up,” “hand wiggle,” or “thumbs down” into the text chat instead of using hand signals.”

## Setup

(Take turns reading each paragraph aloud.)

ON APRIL 11, 2019, the private Israeli space company Spacell's programmed Beresheet spacecraft crash-landed on the Moon at 310-MPH.

The intended research cargo aboard the lunar lander: 1 magnetometer and 1 laser retroreflector.

Added to this by Arch Mission Foundation, a USA nonprofit whose goal is to create "a backup of planet earth," was a digital library containing 30 million pages of info of human knowledge to document its existence...

AND... an undeclared sum of tardigrades and a sample of human DNA secretly tucked within the center of the library package.

In prep for this mission, you and 3,000 millimeter-long tardigrades had been dehydrated into a torpor-like state and sandwiched between the two micron-thin sheets of nickel within the library, next to the human DNA package.

The sheets were suspended in a resin-based epoxy within the library and possibly this epoxy is what saved some of you and the precious knowledge delivered to the moon.

Though highly unlikely, there's a wild theory that the crash on the Sea of Serenity penetrated the moon's surface enough to expose some ice that could melt and rehydrate any exposed smuggled tardigrades.

***It is in this theory where we will begin.***

Seconds after the library was ejected from the lander during the crash, you spilled out and are floating in a teaspoon puddle of moon water.

You suddenly awaken near each other with the Earth reflected in the puddle. What do you do now?

## Tardigrade Characters

**Characters have three traits:** Origin, Hope, and Fear.

**Origin** – You've all grown up together as tardigrade specimens in a lab on Earth (**choose or create one**):

1. You developed feelings for one of the researchers working on the actual mission.
2. You remember eating moss before falling asleep and just woke up here and now.
3. You have wronged some within the community and are looking for a way out.
4. You believe you're on this mission by the non-profit that secreted you in order to serve a purpose that has yet to be revealed.
5. You have a strong devotion to the tardigrade traditions and their continuation.
6. You are descended from a tardigrade who was on a prior mission to the moon in 2007.

**Hope:** What do you want more than anything and what are you willing to sacrifice for it? How does this hope conflict with at least one other survivor's Hope?

**Fear:** What don't you want to happen and what are you willing to do to prevent it? How does this fear reassure another survivor about their decision to solve the crisis?

## Tools

**In-Character:** The mission background, the digital library, human DNA, scientific instruments, remains of the lunar lander, and lunar environment.

**Out-of-Character:** Treat the use of the Internet as using the digital library for research. Use a countdown clock or timer to track how soon available water evaporates and the surviving tardigrades fall to sleep via cryptobiosis (dormant for at least 20 years unless exposed to water).

## Play

Begin by reviewing the requirements, safety, read through the setup, then make characters, play in-character for about an hour, and then debrief.

**Scenes:** Play this game as one long continuous scene from waking to sleeping, with moments on or about Origin, Hope, or Fear to share the spotlight.

**Cryptobiosis Clock:** Set the countdown clock to 1hr from when you begin play *awakened*. Add 10 mins when more water is available (max x3). Unless survivors turn to cannibalism or inflict harm, they will most likely become dormant as the exposed water will either freeze or evaporate from the moon.

## Options

Play as close or as far from humans or tardigrades as desired. If you want to embody a being who barely understands what's going on or "humans" that's fine, as well as playing highly intelligent creatures versed in scientific analysis. Names, habits, beliefs, and more are open to exploring.

Consider Play to Lose and/or Play to Lift by Susanne Vejdemo, <https://nordiclarp.org/2018/02/21/play-lift-not-just-lose/> for more tragedy.

After everyone has had an opportunity to get into character and the situation, anyone may introduce a threat, and then have another player either "Yes, And" it to build on the current threat, or introduce a new threat after every 15+ mins of play as desired.

## Thank You

Thanks to the Golden Cobra Challenge organizers, judges, and participants. Special thanks to Larp Shack for hosting playtesting, and to playtesters Tracy Cooper and Shawn Roske for their warm engagement in play and wise insights for revisions.

## Threat List Suggestions

**Solar Wind:** The remaining melted moon water is evaporating quicker than normal due to strong solar wind. (Subtract 20 mins from the countdown clock.)

**On the Loose:** The crash also woke an ancient moon worm and it's searching for food, water, and shelter.

**Survivors:** There are other tardigrades who are discovered to be alive, wounded, and unconscious.

**The Hungry:** One or more of the cannibal types of tardigrades wakes and is on the hunt with a trap.

**All Alone:** The use of technology or info doesn't work as expected and feelings of fear/despair grow.

## Debrief

Take all the time you need before moving on from the final part. Once everyone is ready you can turn on the lights or remain in the space if you choose. Get hydrated if you need it. If you are able and willing, share your thoughts and feelings about experiencing this larp.

Once gameplay is complete, participants should have the opportunity to answer the following questions to the group. The following questions were listed by Tracy Cooper:

- "How are you feeling?"
- What did your character say or do that you would not have said or done out-of-character?
- What is something that another participant said or did that you appreciated or that enhanced your experience?
- Is there anything else you'd like to share?"

## Surviving Tardigrade Roster Template

Character	Player	Origin	Hope	Fear

## Mission Background

Mission Elapsed Time (Feb. 22, 2019 — Apr. 11, 2019)  
00 YRS 01 MOS 17 DAYS 17 HRS 38 MINS 00 SECS

Nation	Israel
Objective(s)	Lunar Landing
Spacecraft	Beresheet
Spacecraft Mass	1,300 pounds (585 kilograms)
Mission Design and Management	SpaceIL (Private Company) / Israeli Space Agency
Launch Date and Time	Feb. 22, 2019 / 1:45 UT
Launch Vehicle	SpaceX Falcon 9
Launch Site	Cape Canaveral Air Force Station, Fla.
Scientific Instruments	1. Magnetometer 2. Laser Retroreflector

**About the Lunar Lander:** Beresheet was about 5 feet (1 meter) tall by 7.5 feet (2.3 meters) wide with its landing gear and legs deployed. The lander separated first from the rocket, taking the long route to the Moon to save fuel by employing gravitational forces to propel itself. Beresheet slowly widened an elliptical orbit around Earth until it was captured by the Moon's gravity and ultimately commanded to descend.

**Israeli Space Slogan:** Small Country, Big Dreams

**History:** NASA's Apollo 17 astronauts landed near this region on Dec. 11, 1972. Apollo 17 (December 7 – 19, 1972) was the final Moon landing mission of NASA's Apollo program and remains the most recent time humans have traveled beyond low Earth orbit and also the most recent time humans have set foot on the Moon.

Beresheet (pronounced as b'reishit) translates to "In the beginning..." from the first word in the Torah, or Book of Genesis, the Bible.

**ABOUT TARDIGRADES:** Also known as water bears or moss piglets, are a phylum of small invertebrates. First described by the German pastor J.A.E. Goeze in 1773. They are short (0.05mm - 1.2mm in body length), plump, bilaterally symmetrical, segmented organisms. Tardigrades reproduce via asexual (parthenogenesis) or sexual reproduction and feed on the fluids of plant cells, animal cells, and bacteria. They are prey to amoebas, nematodes, and other tardigrades. Some species are entirely carnivorous! Tardigrades are likely related to Arthropoda and Onychophora.

## Sources

<https://serc.carleton.edu/microbelife/topics/tardigrade/index.html>

<https://solarsystem.nasa.gov/missions/beresheet/in-depth/>

<https://www.inverse.com/science/tardigrades-may-have-taken-over-the-moon>

<https://www.inverse.com/article/58484-should-we-care-if-tardigrades-survived-on-the-moon>

[https://en.wikipedia.org/wiki/Apollo\\_17](https://en.wikipedia.org/wiki/Apollo_17)