

1. Record Nr.	UNINA9910795610303321
Autore	Munns David P. D. <1972->
Titolo	Far beyond the moon : a history of life-support systems in the space age / / David P. D. Munns and Karin Nickelsen
Pubbl/distr/stampa	Pittsburgh, Pennsylvania : , : University of Pittsburgh Press, , [2021] ©2021
ISBN	0-8229-4654-8
Edizione	[1st edition.]
Descrizione fisica	1 online resource (206 pages) : illustrations
Collana	Intersections (Pittsburgh, Pa.)
Disciplina	629.47/709
Soggetti	Interplanetary voyages Life support systems (Space environment) Manned space flight
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	When America aimed beyond the moon -- The algatron versus the fecal bag -- The people's "planetship" -- Gardens in space -- Escaping Earth in the Biosphere 2.
Sommario/riassunto	"From the beginning of the space age, scientists and engineers have worked on systems to help humans survive for the astounding 28,500 days (78 years) needed to reach another planet. They've imagined and tried to create a little piece of Earth in a bubble travelling through space, inside of which people could live for decades, centuries, or even millennia. Far Beyond the Moon tells the dramatic story of engineering efforts by astronauts and scientists to create artificial habitats for humans in orbiting space stations, as well as on journeys to Mars and beyond. Along the way, David P. D. Munns and Karin Nickelsen explore the often unglamorous but very real problem posed by long-term life support: How can we recycle biological wastes to create air, water, and even food in meticulously controlled artificial environments? Together, they draw attention to the unsung participants of the space program--the sanitary engineers, nutritionists, plant physiologists, bacteriologists, and algologists who created and tested artificial environments for space based on chemical technologies of life support--as well as the bioregenerative algae systems developed to

reuse waste, water, and nutrients, so that we might cope with a space journey of not just a few days, but months, or more likely, years"--