

Novaya Zemlya

Overview:

Novaya Zemlya, part of the Archangelsk Oblast, is located to the north of mainland Russia. It was a nuclear test site for 35 years, but nuclear activity ceased in 1990. Currently, the military monitors the nuclear test sites, but there is no active, living population on the archipelago. Novaya Zemlya has a remarkable ecosystem that has not been researched or documented because restrictions on travel to the islands were enforced; these restrictions were primarily a result of concern about nuclear levels which might have been dangerous to human health. It has been discovered that nuclear levels are normal, and scientists and other researchers are travelling to the islands to research and document the biodiversity. Concern also exists for the biodiversity of the archipelago because of the amount of nuclear waste that has been dumped into the Kara sea, which may affect the Arctic cod and capelin. This concern is currently being addressed by the military and the Russian government.

Territory:

The Novaya Zemlya archipelago (800 km x 100 km) consists of two main islands, Severny (northern island) and Yuzhy (southern island) separated by the narrow Matochkin Strait; and a number of smaller islands. Total area: 90,650 sq km; 90% of land areas is Arctic mountain desert, with a narrow belt of tundra in the far south; geologically, Novaya Zemlya is the northern limit of the Ural Mountains; highest elevation: 1,547 m.

Location:

Novaya Zemlya, an archipelago in the Arctic Ocean in the north of Russia and the extreme northeast of Europe.

Latitude and Longitude:

Between 70° 31' and 77° 6' N., and between 51° 35' and 69° 2' E.

Time Zone:

GMT +3

Total Land Area:

90650

EEZ:

Climate:

Winters are relatively mild with temperatures averaging between -15 to -30 C; summers are cool with temperatures ranging from 20 to 6.5 C. Average temperature on South Island is -5.7 C, and the average temperature on North Island is -8.7 C. Average precipitation for South Island is 317 mm and for North Island 150 mm.

Natural Resources:

copper, lead, zinc, quartzite, talc, limestone.

ECONOMY:

Total GDP:

Per Capita GDP:

% of GDP per Sector:		
Primary	Secondary	Tertiary

% of Population Employed by Sector		
Primary	Secondary	Tertiary

External Aid/Remittances:

Growth:

Labour Force:

Unemployment	
Year:	Unemployment Rate (% of pop.)

Industry:

fishing, trapping, and seal hunting

Niche Industry:

hunters, trappers, traders, tourists, scientific expeditions

Tourism:

Imports and Exports:



Tot. Value of Imports	0.00 ()
From Eu:	
Import Partners (EU:)	
Partners Outside EU:	
Import Partners:	
Tot. Value of Exports	()
To Eu:	
Export Partners:	
Partners Outside EU::	
Export Partners:	
Main Imports:	
Main Exports:	

TRANSPORTATION/ACCESS

External:

Number of Airports:

There are helicopter landing strips in specific locations to allow scientists and other visitors (tourists) to land.

Number of Main Ports:

Internal:

Air

Road:

Sea:

Other Forms of Transportation:

Economic Zones:

Energy Policy:

Year	Total Energy Production (Mwh)	Type			Total Energy Consumption (Mwh)	Sector				
		Thermic (Mwh)	Geothermic (Mwh)	Other (Mwh)		Domestic (Mwh)	Commercial (Mwh)	Public Service (Mwh)	Industry (Mwh)	Public Lighting (Mwh)

Official Currency:

Banking and Insurance:

Number of Banks and Credit Unions:

Number of Agricultural Credit Unions:

Number of Insurance Companies:

Financial Services:

Communications/E-Commerce:

Public Ownership:

Land Use:

The land of Novaya Zemlya is tundra, and because there is no active participating population living in the archipelago, land is not used for agricultural or commercial purposes.

Agriculture/Forestry:

Forests do not exist on Novaya Zemlya because the majority of the landscape is tundra. The tundra supports plants such willow species, bog bilberry, dwarf birch. The soil on Novaya Zemlya is calcium-rich, thus giving way to a sparse cover of single-coloured moss and lichens – a typical polar desert.

Marine Activity:

Fishing:

Territorial sea: 12 nautical miles; exclusive economic zone: 200 nautical miles.

Marine Life:



Critical Issues:

Environmental Concerns and Nuclear Testing: A large amount of nuclear waste and many nuclear reactors have been dumped into the Kara Sea around the coast of Novaya Zemlya since 1962. There are concerns that nuclear dumping in the Kara Sea may lead to pollution of the Barents Sea (to the west), which has significant stocks of capelin and Arctic cod. If these stocks are damaged or negatively impacted because of nuclear dumping, Novaya Zemlya's sensitive ecosystem will be altered severely. There is also a classified proposal to construct a landfill and chemical waste landfill in the southern part of Novaya Zemlya, and this poses a serious environmental hazard which would further affect the archipelago's ecosystem. Many see Novaya Zemlya as a huge landfill for toxic and radioactive waste because it is over 1,000 km from the nearest industrial centre, and over 280 km from the nearest habitation centre. It is also believed that contamination of the region is not expected to negatively influence future economic activities, namely because of the "normal" radiation readings on the islands. Preservation and Protection of Novaya Zemlya: In 1994, members of the Integrated Marine Arctic Expedition (IMAE) wanted to establish protected areas on Novaya Zemlya to protect and preserve the islands' sensitive ecosystem, as well as preserve areas of historical and cultural significance. In total, twelve areas of international, national, and regional significance are proposed to be protected; these areas range from north to south and vary in geographical size. The proposed areas include both land and water. The Governor of Arkhangelsk Oblast has forwarded the proposal to the federal level for review. The ecosystem on Novaya Zemlya is quite sensitive and fragile, yet it operates and functions in a cyclical nature. Birds eat fish from the sea, excrete guano, and the guano fertilizes the soil with nutrients such as phosphorous and nitrogen. If the Arctic cod and other fish stocks are impacted by nuclear dumping, the whole archipelago ecosystem will be affected.

JURISDICTIONAL RESOURCES**Capital:****Political System:****Political Parties:****Important Legislation:****Principal Taxes:****Associated Power:****Citizenship:****Paradiplomacy:****HUMAN RESOURCES**

340 (1956); population consisted of approximately 2/3 Nenets and 1/3 Russians. Population was evacuated and relocated to the north of mainland Russia in 1961 because of nuclear testing, and their settlements were liquidated. Currently, there are no settlements on Novaya Zemlya, and only scientists and researchers travel to the archipelago to study the Islands, the ecosystem, and the nuclear testing sites.

Island	Area (km sq.)	Population	% of Total Population
Novaya Zemlya	90,650	0	%

Population:	
Year	Resident Population

Age of Population:	0-14	15-24	25-49	50-64	65 and up

Migration:

Crude Birth Rate:

Life Expedctancy:

Crude Death Rate:

Ethnicity:

In the last half of the 19th century, Novaya Zemlya was colonized by a Nenets population, and by 1956, the entire archipelago population was forcibly removed due to the establishment of nuclear testing sites.

Class Division:**Languages:****Religion:****Literacy:****Education System:**

Total Pre-schools:()	
Total Primary Schools	
First Level:	



Second Level:	
Third Level:	
Total Secondary Schools:	
Total Professional Schools	
Universities:	

Number of Schools per Island:										
	Pre-school		Elementary			High-school		Prof.	University	
	Pub	Priv	1	2	3	Pub	Priv		Pub	Priv

Students Enrolled:					
Year:	Pre-School	Elementary	High-school	Prof.	University

Teachers							
Year	Pre-School	Elementary			High-School	Prof.	University
		1	2	3			

Medical Services:

HISTORY AND CULTURE

History:

Novaya Zemlya was formerly known as Nova Zembla, or "New Land." Russians knew of the archipelago as early as the 11th century when traders from Novgorod visited the area. The archipelago was used as a source of meat, fish, furs, down, and feather for many centuries. Discoveries of tools in the early 1990s suggest that human occupation may date back to the Stone Age, but the date or relationship of these people to a specific culture is currently unknown. In the last half of the 19th century, a population of Nenets colonized the area. However, in 1954 the Soviet Union established a nuclear testing ground at Novaya Zemlya, and by 1956, the entire archipelago population had been forcibly removed to the mainland of northern Russia. From 1955 to 1962, Novaya Zemlya was used for submarine, surface, and atmospheric nuclear explosions. Until 1990, Novaya Zemlya was used for underground explosions. Since 1956, considerable military activity has occurred in Novaya Zemlya, primarily associated with nuclear weapons testing. The military bases are currently still monitored, but no nuclear explosions have been carried out since 1990. Until the closure of the world's largest nuclear test base in 1990, a total of 130 nuclear tests were blasted from Novaya Zemlya. Altogether, the blasts released 265 megatons of energy. The largest explosion to ever shake the earth was detonated from Novaya Zemlya in 1961. The force of the blast shattered glass within a radius of 500 to 900km. The shock encircled the earth several times. Currently, proposals have been submitted to the Arkhangelsk Oblast administration to protect one third of the area of Novaya Zemlya to create a national park. The proposal is currently under review. Ironically, the 35-year period of nuclear testing on Novaya Zemlya helped to protect and to preserve the flora and fauna of the archipelago because visitation and exploitation of natural resources was restricted. There are also proposals submitted to construct a landfill for nuclear and chemical waste in the southern part of Novaya Zemlya, and if the proposal is approved, the new landfill will pose a very significant environmental hazard.

Referenda:

Recent Significant Events:

Music, Dance, Handicraft and Patrimony:

This is an island that has been representational of "the Northern Wastelands" pictured in the novels of western thinkers. It is thought to have been the inspiration for the fictional land of Zembla, which plays a key role in Vladimir Vladimirovich Nabokov's novel "Pale Fire" written in 1962. Nabokov was a multilingual Russian-American novelist and short story writer also noted for his poetry.

Sources:

Glazov, M., & Goryachkin, S. (2000 Winter). Of Polar Deserts and Arctic Tundra: Novaya Zemlya's Remarkable Terrestrial Ecosystems. Russian Conservation News. 22, 13-35 Kuznetsov, E., & Kbakbin G. (2000 Winter). New Discoveries of Novaya Zemlya's Avian Treasures. Russian Conservation News. 22, 17-18 Logachev, V., & Matusbchenko, A. (2000 Winter). The Current Impact of Past Nuclear Testing on Novaya Zemlya. Russian Conservation News. 22, 23-24 Mazourov, Y. (2000 Winter). Novaya Zemlya: Nuclear Wasteland or Pristine Nature? Russian Conservation News. 22, 17-18 Masourov, Y. (2000 Winter). One-third of Novaya Zemlya Proposed for Protection. Russian Conservation News. 22, 16-17 Novaya Zemlya. The 1911 Edition Encyclopedia. (2004). Retrieved May 23, 2005 from the World Wide Web: http://7.1911encyclopedia.org/N/NO/NOVAYA_ZEMLYA.htm Novaya Zemlya. Wikipedia. (n.d.). Retrieved May 22, 2005 from the World Wide Web: http://www.wikipedia.org/wiki/Novaya_Zemlya Williams, M. (2005). Novaya Zemlya. In The Encyclopedia of the Arctic. (Vol. 2. Pp. 1513-1515). New York: Routledge Wilson, G. (2002). Russia: The Russian Federation. Handbook of Federal Countries. (Ann L. Griffiths, Ed). Montreal and Kingston: McGill-Queen's, 249-268

www.britannica.com/eb/article-9054606/Vladimir-Nabokov. Cited April 2008.



Useful Links:

IslandStudies.ca

www.uei.ca

www.google.ca

Please address queries to:

Institute of Island Studies

University of Prince Edward Island (UPEI)

550 University Ave

Charlottetown, PE, Canada, C1A 4P3

Copyright 2007. Institute of Island
Studies, UPEI. Educational and
Non-Commercial Use Only