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Obituary

Alexandra Naumovna Berkutenko (1950 – 2014)

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Alexandra Naumovna Berkutenko was born on September 19, 1950 in Magnitogorsk. She graduated from Gor'ky Ural State University with a major in biology and defended a PhD thesis in 1980 in Tomsk University (Cruciferae of southern Magadan Region). In 1997 she became a Doctor of Science upon defending her thesis (A critical overview of Cruciferae in Beringia with an emphasis on genetic relationships) in the Main Botanic Garden of the Russian Academy of Sciences. From 1971 to 1973 Alexandra Naumovna



was employed as a chemistry high school teacher in Sverdlovsk. Immediately upon graduating from the university, she left for the Magadan Institute of Biological Problems of the North, where she became a senior lab technician in the Botanical Laboratory in September 1973. Later on she worked there in the capacity of a junior and then senior researcher, as leader of the Herbarium Group from December 1988, and as head of the Botanical Laboratory from September 1998.

Alexandra Naumovna was an inspiring leader—always generating ideas, nurturing new directions of research, and attracting young scientists to work. Five PhD theses were defended under her leadership and scientific guidance. She assembled documentation and applied for registration of the Herbarium in the international Index Herbariorum (MAG). The registration was completed in 1997. During more than 40 years dedicated to science, Alexandra Naumovna authored and co-authored over 250 scientific and popular works, of which the most significant ones were Guide to Plants of Repetek Nature Reserve (1975), Cruciferae of Kolyma Upland (1983), Vascular Plants of the Soviet Far East (volume 3, 1988), Medicinal and Edible Plants

of Alaska and the Russian Far East (1995), The Red Book of Chukotka Autonomous District (2008), The Red Book of Magadan Region (2008), Flora and Vegetation of Magadan Region (2010), Plant and Animal Life of Magadansky Nature Reserve (2011).

While the core of her scientific interests were Cruciferae in Beringia, their systematics and connections with Tibet, she was apparently fascinated with the entire world of northern Asiatic plants, which she depicted in a few popular books and photographic albums. As a centerpiece, she assembled a vast seed collection from this region and published an atlas of seeds.

Warm memories of Alexandra Naumovna Berkutenko, an energetic, creative, lifeloving person will forever remain in our hearts.

Memories of A.N. Berkutenko

M.G. Khoreva

First acquaintance

I remember my first visit to the Botanical Laboratory at the Institute of Biological Problems of the North in 1988. I entered the old Institute building on Karl Marx Street in Magadan hoping to receive some help with the identification of my field collections. I was at the time a Timiryazev Academy student at the Fruit and Vegetable Department in the Group of Medicinal and Oil-Bearing Plants. During that summer I combined my field practice with a vacation in my native City of Magadan.

Alexandra Naumovna happened to be the first person in my life who told me the names of local plants. At the time, the founder of the Laboratory A.P.Khokhryakov, together with his wife and follower M.T.Mazurenko, returned to Moscow, so the Laboratory was going through difficult times. Alexandra Naumovna organized the Herbarium Group. Yet there were no vacancies then, not even for a graduate of Timiryazev Academy, and no openings in the foreseeable future. It was only in 1991 that I received a phone call from Alexandra Naumovna inviting me to apply for a temporary position as a laboratory technician. My student work on medicinal plants had to be discontinued, as Alexandra Naumovna suggested a different research topic: the flora of Tauya Bay, which I plunged into with great enthusiasm.

1991 field season

The spirit of escapade, which was so characteristic of Alexandra Naumovna, was manifested in the organization of the field work. She would come to the fishing sea port in Marchekan [Magadan suburb], find out which vessel would be heading in the required direction, and provide to the captain numerous arguments justifying the absolute necessity for him to pick up and drop off a small scientific expedition. During the summer of 1991,



apparently capitalizing on nothing but her charisma, she managed to organize field trips for young scientists, members of the Herbarium Group, to the islands of Tauya Bay. She visited Nedorazumeniya Island (Island of Misunderstanding) with Rimma Drovetskaya, Zavyalov Island with Nina Sazanova, and Spafaryev Island with me. These trips resulted in a few scientific articles and a PhD thesis later on.

Alexandra (left) on Nedorazumeniya Island with Rimma Drovetskaya, 1991

I had no more than a couple of hours for preparations for the trip. There we were housed

in a dormitory for workers of the fish processing plant (life was bursting on the island at the time; now there are only ruins...). During a few warm days we bathed in icy puddles under the snow banks of the Bering Mountain or else right in the Sea of Okhotsk. I found out then that Alexandra Naumovna attended a winter-bathing ("walrus") club in Magadan. A few days of intensive field work passed, and I begged:

- Is there a chance we can take a break today? Perhaps dry the herbarium collections for a change?

- What do you mean "take a break"? —was the reply.

And so that day we went to the southern part of the island, which differed in its high-elevation character of vegetation and was a hot spot for plant rarities. I remember discovering there a northern species, Chamisso buttercup (*Beckwithia chamissonis*). At some point a dense fog descended on us (this was in July). A geological tent swam out of this fog right in front of us. The inhabitant of the tent turned out to be hospitable and offered us hot tea. From his position on the elevated shore, he was directing a geological survey vessel that was prospecting for oil on the shelf in that part of the Sea of Okhotsk.

In September of the same year AN enticed me with a field trip to the Kamennyy Venets [translated as Stony Crown, a mountain in the vicinity of Magadan] to study the flora of this local natural beauty spot. We would have had to cover about 10 "empty" kilometers along the shore to reach the mountain; instead we again went hitchhiking to the sea port. It took a while,

yet finally we found a boat that took us to the ship which was supposed to lie at anchor right opposite the Venets Mountain. From there, we were courteously brought to the shore in a rowing boat. We happily made it back, even though it was already dark and we missed the low tide. Our trophies included field records, herbarium samples, and additionally two full buckets of choice cowberries (lingonberries).

Later on I managed to find opportunities for field work on the Islands. Even though I did not go together with AN anymore, I remembered her good example, which prompted me to act rather than whimper for the lack of financing.

Alexandra Naumovna as a leader

For ten years, from 1988 to 1998, AN volunteered as Chairwoman of the Herbarium Group, during which time the Group was transformed into a rather amicable and hardworking team. Meanwhile the institute moved to the new building at 18 Port Street. Upon that move, the team once again acquired the status of a laboratory, claiming its former name: the Botanical Laboratory. She used to repeat the expression



With Dmitri Lysenko after the defence of his PhD, 2011

coined by Academician Nikolai A. Shilo: when supervising, make believe there is no supervision. The staff had the freedom of writing articles from home. That independent style turned out to be particularly handy during the long absences of AN in the 90's. In 1992 she spent several months in Kew Botanic Gardens taking the Herbarium Management Course. She was always on wheels, traveling across the country and abroad, yet the flame in the hearth of Magadanian botany was never extinguished, feeding from the energy of dedicated staff. AN described her own personality with one word: gypsy. She could not stay put for a long time and often took off to scientific conferences spontaneously, without further ado.

AN always found the right arguments to speak on behalf of the Laboratory in front of the Institute directors. She would prove the necessity of hiring more staff, employing temporary workers for mounting specimens, finding opportunities for capable students, and so on. By 2014, six Candidate and two Doctoral theses were completed in the Laboratory, covering an array of research directions. Though laboratory life was not without disagreements or grievances, none were ever mentioned at the festive table, during the parties, at which AN

traditionally surprised everyone with puzzles—either botanical or culinary. As the team consisted exclusively or mostly of women, AN liked to invite a nice gentleman to the table.

Some guests befriended the Laboratory. The geologist Yuri Fedorovich Nekhoroshkov, a man with a romantic personality, a lover of geological and toponymic puzzles, and an enthusiastic organizer of geological field trips for children, first showed up with a small collection of plant samples that he had collected around Khasyn Settlement. Most samples did not present any challenge for identification except for one, which neither I nor even AN could put a name to. Mind you, AN could identify many plants, as she herself would put it, "by a cigar-butt and a hat" —due to the fact that amateurs often brought in miserable chunks of plants or out-of-focus images for identification. Yet Nina Sazonova, our mycologist, upon casting a glance at the mystery plant (supposedly a new species for the flora of Magadan!) promptly recognized a cyclamen. That's how both AN and I succumbed to a good prank. It is sad that Nekhoroshkov died so early. In 2008 his friends published his book *The legends of the Kolyma Land* full of local historic facts and still unresolved mysteries and puzzles.

Such a special set of mind, the ability to puzzle and surprise was always characteristic of Alexandra Naumovna. Word of her death has come from Yekaterinburg and stunned us all.

Her favorite dress color was blue. One of the botanical ladies at a conference in Vladivostok, which Alexandra Naumovna had attended, recalled seeing how she "flew by, like a blue comet." What a prominent personality, bright, like fireworks, able to get her way in anything, a generator of ideas, some of which remain unrealized...

Memories of A.N. Berkutenko

O.N. Vokhmina

I am holding the first illustrated book devoted to the flora of three volcanoes—the three most visited on Kamchatka: Avacha, Koryaksky, and Mutnovsky—entitled *Plants of Kamchatka volcanoes*, addressed to a specialist as well as general reader. It is the last popular work by Alexandra Naumovna Berkutenko. Every photo in this book, every page of the text up to



With secretary of Institute, Lyubov Kukhlii (left), at Mayday celebration, Magadan, 2013

the very punctuation marks is painfully familiar to me—revoking an array of memories from episodes of the author's work to the look and smell of copies still warm from the typographic printer.

I was aware of the author's endeavors with every publication during the past three years. I am happy and proud to have them all in my library, signed by the author, Doctor of Science Alexandra Naumovna Berkutenko and my close friend—my Sasha. Today the pain of the loss is still too acute, her voice is too vivid in my head for me to spend hours reading my favorite ones.

We met because I had a drive to learn about the nature of my native Far North and she authored the *Atlas of plants growing in Magadan*. Our acquaintance very rapidly grew into a warm yet so very short friendship.

They ran out of copies in the bookstore. Seeing my disappointment, the saleswoman suggested that I contact the author and even provided a phone number, so I could try and get a copy. Alexandra Naumovna turned out to be sociable and outgoing. Even though she did not have an extra copy of her book, she asked for my phone number-just in case there would be another print. I gladly obliged. The next morning the phone rang, and Alexandra Naumovna invited me for a walk at the sea front. We met at the Nagayev Bay Overlook. It turned out we lived in the same neighborhood and admired the same ocean front view from the windows. Alexandra Naumovna was fun to talk with: inquisitive, knowledgeable, easy-going. I had a feeling that I had known her for ages. Right away she insisted that we use "thee" instead of "you" and revolted against me using her full name with the patronymic. I was at first uneasy about that, but promptly overcame my discomfort. The difference in our age was indeed insignificant, which helped. Our seaside walks promptly became a daily routine, and conversations grew longer, often continuing in her cordial, hospitable home. Our non-stop talks covered everything from weather to politics, yet of course we talked plants more than anything else. Sasha tirelessly answered scores of my questions in great detail and with obvious delight, generously adding to my knowledge of the flora. Stories of her world travels constituted volumes of never-written books! When the weather was nasty, we continued on the phone, calling a few times a day and making the phone wires burn. The more we knew each other, the more I admired her. She had an amazing ability to be aware of everything, participate in everything, be everywhere in time. We went to the theater, concerts, and various exhibitions. Knowing about my dedication to photography, not only did she take me to the photo-club and introduce me to all the professional photographers in town, but also offered me a job at the

institute, thus helping me fulfill my calling to be employed with a nature study.

Sasha had a blessed personality: I never saw her irritated or hurt. Gracefully and with a great deal of humor she found the way out of daring situations. And what a master of wonder she was! Making surprises was a favorite amusement of her creative nature. She loved festivities and knew how to make things festive! Dresses she made came out stunning, her culinary art was remarkable, and speeches inspirational. She filled life with bright colors. She was hurrying, as if realizing there was not much time left...

I have been staying away from the seashore for a long while, and it will take me a while more to go...

Winter fishing

Some choose to purchase fish at the market; Alexandra Naumovna preferred to make sure the fish was fresh-right at the place of fishing. She looked forward to the time when the sea would become still with ice and the season of winter fishing would be again upon us. The smell of fresh cucumbers coming from fishermen signifies the start of the season when sweet smelt, a favorite treat of many Magadanians, appears in our waters. At that time the trajectory of our seaside walks would shift 90 degrees: we boldly traversed the ice field in the direction of anglers' holes. With a know-how manner Sasha approached every fisherman and appraised the catch. Having chosen the right game, she took to negotiations first figuring out if the fisherman had any intentions to sell the catch. If not, then she capitalized on her gift to persuade, leaving no chance for the man to bring the fish to his home stove. Once the lad agreed to return home with just the monetary equivalent of his catch, the price negotiations would start, and no contestant could beat Alexandra Naumovna in that. Finally we happily departed with a nice catch. As to the fisherman, he still had enjoyed a good time at the hole and additionally had some material compensation, even though it was lower than the market price. While I was just taking off my coat and boots and rubbing my frozen cheeks, the aroma was already spreading around, as Sasha, delighted with her fishing luck, was frying the freshest smelt. On occasions when there was no good catch, Alexandra Naumovna always managed to persuade someone to sell the fish yet to be caught. The fish was then delivered to her door! This was, in essence, Alexandra Naumovna's scientific approach to ice fishing based on the unbeatable power of prevailing.

Memories of A.N. Berkutenko

Nina A. Sazanova

I have worked with Alexandra Naumovna in the Botanical Laboratory for 31 years. She was a fine botanist with an excellent knowledge of the flora of Magadan. The family Cruciferae was at the center of her interests and provided material for her Candidate and Doctoral theses. Everyone can assess the scope of her scientific work by looking through the list of her publications. Here you will find taxonomic works, ones on plant diversity, yet others dedicated to endemic and rare species, descriptions of new species (*Valeriana murrayii* and others), new findings of species (*Silene macrosperma* etc.) and genera (such as *Grossularia*) for East Siberia, floristic surveys of reserves and natural features, works on ethnobotany and medicinal plants, on chromosome numbers in Cruciferae, and an account of genetic variability in some conifers in the Russian Northeast. Alexandra Naumovna devoted her energy to the historic study of the flora formation in the region, explored its connections with the floras of North America, the Himalayas and Tibet using the family Cruciferae as an example. She was always striving to keep pace with time by developing new directions of research in the Laboratory. In addition to floristics, she devoted much time to carpological collections, actively assembling the atlas of seeds.



With her husband, Alexey Polezhaev, in the Botany Department, 2005

Alexandra Naumovna went on field trips every year, making collections not only in the Magadan area (in its continental part as well as on the islands), but also outside these limits: on Chukotka, Kamchatka, Sakhalin, in Maritime Province, Siberia, and the Urals. Her samples were pressed rather carelessly, which used to trigger laments from Andrey Pavlovich Khokhryakov. She did not have enough patience to pedantically spread

plants for drying. However, she certainly fully realized the importance of the herbarium work, so that after A.P. Khokhryakov's departure, she guarded the Northeast Collection and prevented all attempts to disperse the holdings by transferring them to other herbaria. Later on, thanks to her efforts, the institutional herbarium acquired the international code (MAG).

She was uniquely predisposed to unveil "detective stories," as she called them, dig out

information on the history of a species' studies, discover remnants of extinct populations, trace type specimens, always laying emphasis on the study and citation of the types. The most recent example of this kind was her narrative on the Gorgon plant (*Euryale ferox*), which she published in the *Bulletin (Vestnik) of the Russian Acad. Sci. Far East Branch* dedicating it to the Chinese lunar calendar year of the Dragon.

Alexandra Naumovna actively explored many herbaria not only in this country, but also abroad, even when vacationing in the tropics. During trips of any kind, she first of all was interested in botanical walks, which she then always vividly described to her colleagues. She would customarily bring back some botanical puzzle: a sample, fruit, or photograph, making it sound like an intrigue, stirring our minds, memories, logical abilities, our very interest in plant life.

She was always striving to look special. This is very well applicable to the titles of her articles: What is *Draba tschuktschorum* Trautv.? What is *Braya tilingii*? Tibet—Altai—Beringia: Does taxonomic differentiation match geographic isolation? Nature of unusual underground structures in *Cardamine trifida* (Lam. ex Poir.) B.M.Jones, or do vegetative characteristics matter in the circumscription of genera in Cruciferae? How many species of *Schivereckia* are there in Russia? A new combination in the genus *Arabis*, or writing once again about the genus Borodinia (Cruciferae). The same was true for everyday life: her creativity was exhibited in everything she touched. She used to make her gifts, especially those for the New Year, on her own, from natural materials. For a while she was into clay figurines and presented



Culinary masterpiece, 2006

everyone around with clay pendants; then there was a period devoted to ceramics painting when she gave away cups and saucers; she would also make small panels of mounted rocks and sea stars. I am sure many Magadanians have been keeping their *fenechki*—those hand-woven bracelets received from AN as tokens of friendship. In the Laboratory we have a decoupaged mirror carefully framed in colorful dry leaves by Alexandra Naumovna.

She loved holidays and always took part in culinary competitions, amazing everyone not so much with the taste of her dishes as with their look. She knew how to attract attention with a special outfit, a special post card, or a special dance. Our festive table traditionally featured a *sharlotka* (Russian apple pie) with cowberries, but occasionally AN spoiled us with her fish cake. What a remarkable cake that was! None of her fellow botanists could make it! It seemed to be nothing really special: very ordinary shortbreads and quite simple layers (herring with potatoes, red fish with scallops, etc.), but the point was that each layer was different, and the topping was always of red caviar. This resulted in such a remarkable, unbeatable treat that no one could refuse to taste a bit. As far as originality went, she had no competitors.

It is so sad that Alexandra Naumovna left us for the heavens so early, when she still could do so much more with all her energy and creativity potential. We will miss her and keep wonderful memories.